# The American Artisan

## THE HARDWARE RECORD

Vol. 45.—No. 19. CHICAGO, MAY 9, 1903. $2.00 Per Year.



LIBRARY OF CONGRESS RECEIVED MAY 11 1903 COPYRIGHT



**BOLTS**

Write for General Catalogue "C" and Prices.

**COLUMBUS BOLT WORKS, Columbus, Ohio.**

**PURE ASPHALT ROOFING**

Never Dries Out or Cracks — Our Tarred Ready Roofing, Sisters' Felt, Building Paper, Roofing Cements, Paints, Etc. WRITE US FOR PRICES.

**J. L. PERKINS & CO., 235 Lake St., CHICAGO.**

**Never Will Leak . . .**

American Seal Elastic Oil cement will not get hard—always stays elastic.

Stops leaks in any roof—old or new, and will wear for years. Fix up the roof now and stop the leakage—in money and roof.

Use it on new work for jointing and 'round your skylights—follow it with a coat of American Seal Roof Paint—the best made—and the top of your house is safe for years. *Prices for the asking.*

THE WM. CONNORS PAINT MFG. CO., TROY, NEW YORK.

WESTERN AGENTS Dept. A. { J. L. Perkins & Co., 235 Lake St., Chicago. Stockhoff Supply Co., 107 North Main St., St. Louis.

THIS SPACE FOR SALE
Inquire of Owner
Daniel Stern, 69 Dearborn St.
CHICAGO.

**TINNERS FIND EMPLOYMENT**

By advertising and using THE POWERS AUTOMATIC CHIMNEY TOPS

They make chimneys draw, give tinners employment making stocks, and give the dealers profit

Sold by Hardware Jobbers and Dealers

Made only by **POWERS BROS.** STREATOR, ILL.

This cut free to dealers.

**BURTON'S Fuel Economizer**

Attached to a stove pipe saves more fuel and radiates more heat than any other stove pipe attachment.

AN EASY SELLER.

Assertions Backed by Guarantee.

The W. J. BURTON CO. DETROIT, MICH.

**ATLAS BOLT & SCREW CO.**
CLEVELAND, O.

We make a full line of

Stove Bolts, Stove Rods,
Machine Screws,
Pointed Pins,
Threaded Wires,
Rivets, Special Bolts,
Mica Bolts,
Cold Pressed Nuts.

CONCERNS who are building up a reputation on the quality of their goods are obliged to make as good, and if possible better, goods than their competitors. We are building up our reputation, and incidentally a FEW SCALES and new buildings every year to keep up with our orders. We would be glad to receive your inquiries.

OSGOOD SCALE CO., Binghamton, N. Y.

**Black Diamond Files and Rasps**

PERFECT—ALWAYS

Twelve Medals Awarded

At International Expositions

**G. & H. BARNETT CO.**
Black Diamond File Works, PHILADELPHIA, PA.

**Nicholson File Co.**

GENERAL OFFICES: PROVIDENCE, R. I., U.S.A.

Manufacturers of

**FILES and RASPS**

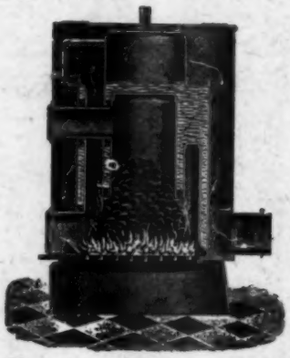
NICHOLSON, KEARNEY & FOOT, ARCADE, AMERICAN, GREAT WESTERN, McCLELLAN, EAGLE, J. B. SMITH, "X. F." GOLD MEDAL.

**GENEVA TOOL CO.** Hand Agricultural Tools, GENEVA, OHIO.

IDEAL Boilers and AMERICAN Radiators are good — will investments — they satisfy and bring the contractor more orders.

AMERICAN RADIATOR COMPANY

LAKE & DEARBORN STREETS, CHICAGO.



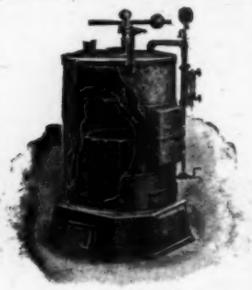
"DEFENDER" STEEL BOILER

For Steam and Hot Water Heating Surface Burner. For Soft and Hard Coal. Portable and Brickset.

Kewanee Boiler Company, Kewanee, Ill.

167 E. LAKE ST., CHICAGO.

St. Louis Office, 518 Bank of Commerce Bldg.



The Columbia

OUR NEW PORTABLE BOILER

for Steam and Hot-Water Heating, is a trade winner. If you have not received our price-list write for it and secure the agency for your city.

VANCE BOILER WORKS, 148 Water Street, Geneva, N. Y.

MAYER & COMPANY

MANUFACTURERS OF

WE USE THE BEST STEEL HAVE THE BEST METHODS OF TEMPERING AND PAY THE HIGHEST WAGES

BEST ON EARTH

DO NOT BE DECEIVED

GOLD MEDAL FILES

NOT IN THE TRUST

PHILADA. U.S.A.

B. G. I.

The Tomlinson Cleaner

Is the most satisfactory means of thoroughly cleaning a shot gun ever invented. It will absolutely remove rust spots and keep a gun in perfect condition. Will fit any standard rod and any gun. The Tomlinson is cheap at $1.00 for it will last a lifetime with proper care. New wire sides furnished.

BRIDGEPORT GUN IMPLEMENT CO.,

Agency 313 Broadway, New York City, N. Y. BRIDGEPORT, CONN.

M. TRAVILLA,

QUINCY, ILL.,

MANUFACTURER

"Air-Tight" Stoves

ASK FOR PRICES.

Wellsville Polished Steel

"THE VERY BEST."

PETERS AMMUNITION

Peters Factory Loaded Shells Is the most complete line of Shotgun Ammunition on the market.

Loaded with all the standard bulk and dense smokeless powders, semi-smokeless and black powder, fulfilling every requirement of the sportsman at the trap or in the field.

Peters Cartridges Hold the World's Records in Rifle, Revolver and Pistol Shooting.

Eastern Department: 80 CHAMBERS ST., NEW YORK, T. H. Keller, Manager.

HIBBARD, SPENCER, BARTLETT & CO., Chicago, Ill.
CHARLES G. GRUBB, Pittsburg, Pa.
F. B. CHAMBERLAIN CO., St. Louis, Mo.

THE PETERS CARTRIDGE CO.

CINCINNATI, OHIO

# TRIUMPH

## FURNACES AND HEATERS

### UP-TO-DATE.

We beg to announce to the Western Trade that we have made arrangements with

## JOHN KONTNY

153-159 JEFFERSON ST., CHICAGO, TO HANDLE THE

### TRIUMPH FURNACES AND HEATERS

The best operating and easiest selling line in the market. Our Furnaces and Heaters are up-to-date XXth Century Constructions. The best that years of experience can produce, and we shall carry complete stocks for prompt shipment both at Dayton, and Chicago.

**THE CRAIG-REYNOLDS FOUNDRY CO., DAYTON, OHIO.**

Z. A. CRAIG, President.

VICTORY

ECLIPSE

NEW LINE OF COAL AND WOOD COOKS AND RANGES.

THREE FORMS.

Combination Coal and Wood. Duplex Grate.

Wood Only.
Raised Hearth Style. (As here shown.)

Wood Only.
Drop Ash Pit.

OVEN SIZES.

Coal Cooks.
14 in., 16 in., 18 in., 20 in.

Coal Ranges.
4 hole or 6 hole, 18 in. and 20 in.

Wood Cooks.
15 in., 17 in., 19 in., 21 in., 23 in.

Wood Ranges.
4 hole or 6 hole. 19 in., 21 in., 23 in.

A complete and up-to-date line of excellent quality at a very low price.

WRITE FOR OUR New Catalogue No. 20 showing the best selling line of Stoves and Ranges on the market.

THE ECLIPSE STOVE CO., MANSFIELD, OHIO

Repository, St. Anthony Park, Minn., W. H. GURENHAGEN, Mgr.
Atchison, Kans., A. J. HARWI HDW. CO., Gen. Agents.

Moore's Stoves Always Please

JOLIET STOVE WORKS,
Joliet, Illinois.

HOLBROOK, MERRILL & STETSON,
San Francisco, Sacramento, Los Angeles

51

# THE SUN STOVE COMPANY

**DETROIT, MICHIGAN.**

MANUFACTURERS OF **SUN STOVES**

HOT BLAST OR COAL

**Gasoline, Oil and Gas Stoves,**
**Ovens and Oil Heaters,**
**Hot Blast Smoke Consuming Coal Heaters,**
**Air-Tight Heaters for Wood,**
**Gasoline Torches and Lamps.**

**The Sun Oil Heaters** for small rooms, offices, etc., where moderate heat is required are attractive in design, highly finished, light and portable smokeless and odorless, low priced. Materials and workmanship the best—they have no superior. Write for printed matter.

**Our Sun Hot Blast** Smoke Consuming Coal Stove for soft or hard coal is not equ led by any on the market. Consumes **90 per cent** of smoke of soft coal. Does not clog the chimney with soot, and throws out a greater heat than any base burner. Construction and finish the very best.

**The Sun Air-Tight**

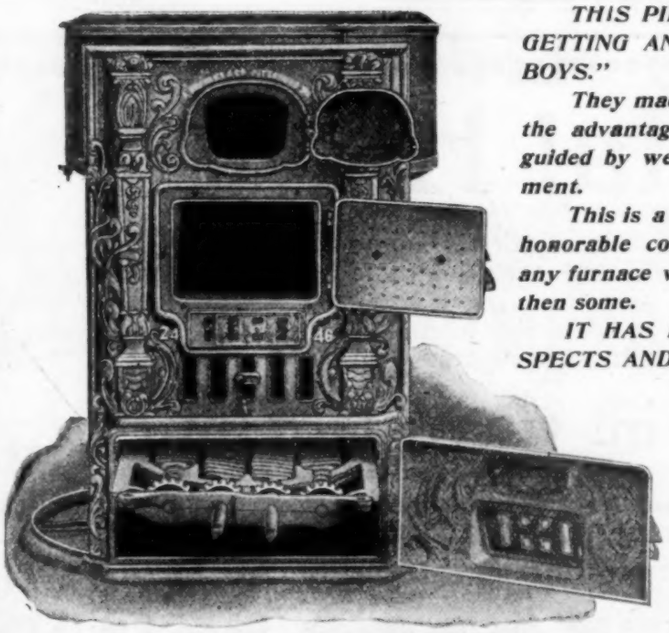
Stoves for Wood are all strictly up-to-date in finish and construction. None are better made. We make all the selling sizes.

**A TRIAL ORDER WILL CONVINCE YOU.**

AIR-TIGHT FOR WOOD

*"There is no genius like the genius of labor; there is no reward like which comes to energy, system, perseverance."—NAPOLEON.*

# THE ETNA FURNACE



*THIS PIECE OF GOODS IS THE RESULT OF GETTING AN "OLD FELLOW MIXED WITH THE BOYS."*

*They made a wonderful combination and gave us the advantage of having rare constructive genius guided by well seasoned experience and sound judgment.*

*This is a Furnace that meets all requirements of honorable competition. Whatever good is found in any furnace will be found in the Etna Furnace—and then some.*

*IT HAS NEVER BEEN EQUALED IN ALL RESPECTS AND WE HEREWITH GIVE THE FIGURES WHICH PROVE TO A MATHEMATICAL CERTAINTY THAT IT IS*

THE BEST PROPORTIONED FURNACE EVER BUILT.

*It would be foolish to say that other people can not build as good a furnace, but it is safe to say that they are not doing it.*

*FACTS THAT WON'T RUB OUT.*

| FIRE POTS. | CASING. | HEIGHT CASTINGS. | FIRE TRAVEL. |
|---|---|---|---|
| 18 inches | 36 inches | 47 inches | 11 feet 8 inches |
| 21 inches | 40 inches | 48 inches | 12 feet 7 inches |
| 24 inches | 46 inches | 52 inches | 13 feet 8 inches |
| 27 inches | 52 inches | 52 inches | 15 feet 2 inches |
| 30 inches | 60 inches | 55 inches | 17 feet 3 inches |

*Fire Pots are Straight.*

THE PITTSBURGH STOVE & RANGE CO. Pittsburgh, Pa.

# CHAMPIONS

**ALSO MARQUARTS**

They possess every feature of genuine merit known to modern steel range construction and have one feature found in no other range on the market in the shape of an additional flue, which is below the main heating flue, and conducts the air through the ash pit to the combustion chamber.

**CHAMPION STEEL RANGE CO.**
**CLEVELAND, OHIO.**

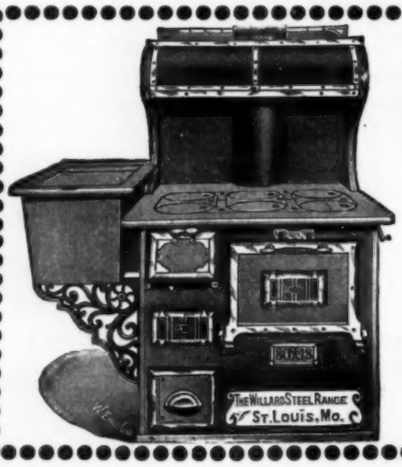
*The*
# FAULTLESS
# MALLEABLE

**Faultless Mfg Co.,**
**617 AUSTIN AVE., CHICAGO.**

## The Sheet Metal Workers' Assistant.

For Zinc, Sheet Iron, Copper and Tinplate Workers, etc., containing a selection of Geometrical Problems; also, Practical and Simple Rules for describing the various patterns required in the different branches of the above trades. By Reuben H. Warn. Illustrated by 32 plates and 37 wood engravings. $3.00.

**For Sale by**
**DANIEL STERN,**
**69 Dearborn Street**
**CHICAGO.**




# Ha! Ha!

The retailer who handles the *Willard Steel Range* can laugh at catalogue house competition. Low Price and High Quality are convincing arguments in its favor and tell the story of its success.

**Wm. G. Willard, Mfr.**
**619-621 N. Fourth St., ST. LOUIS, MO.**

# HERO Furnaces

**FOR FURTHER PARTICULARS ASK**
**Chas. Smith Co.**
**122 Lake St., Chicago**

# BEST FOR A COLD CLIMATE

# ALUMINUM ENAMEL

**HIGHEST GRADE MADE**

**FRICTION TOP CANS**

1-6 Pint, 3 doz. in case, Price $.....per gross.
¼ Pint, 3 doz. in case, Price $.....per gross.
½ Pint, 1 and 3 doz. in case, $.....per gross.
1 Pint, 1 and 3 doz. in case, $.....per doz.
1 Quart, 1 doz. in case . . $.....per doz.
½ Gallon, ½ and 1 doz. in case.....per gal.
1 Gallon, ½ and 1 doz. in case.....per gal.

**BUY FROM YOUR JOBBER**

**NICKEL PLATE STOVE POLISH CO., CHICAGO**

For Hard Coal, Soft Coal, Wood.

# COLUMBUS STEEL COOK

Pouch Feed, Duplex Grate and Extension End Fire Box to take 24-inch wood; Polished Steel.

Handsomely Ornamented

Made upon Honor. Sold upon Merit.

Also full line of Steel Ranges in Different Grades.

## Columbus Stove Co.

COLUMBUS, :: OHIO

C. E. HAMLIN, 1312 Olive Street, St. Louis.

Write for Complete Catalog.

Write us for Prices and Catalogue

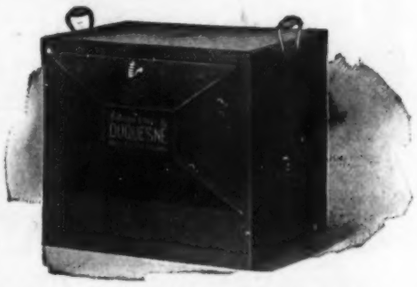
# Price and Quality

**MAKE VALUES.**

The best values offered in **Gas Ranges, Hot Plates, Ovens and Cookers,** are sold under this name

## SIMPSON

which means a guarantee




**SIMPSON STOVE & MFG. CO. - OFFICE, PITTSBURG. WORKS, CANONSBURG.**

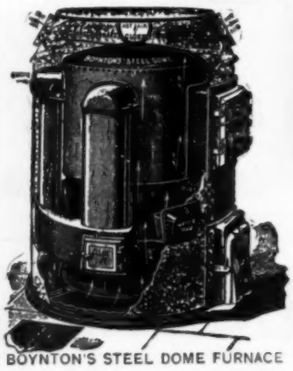

*E. J. KETCHUM, West Duluth, Minn., writes:*

***Please discontinue my advertisement for help, as I have engaged a man and have too many inquiries.***

1903

THE ONLY GENUINE

# BOYNTON Heaters



BOYNTON'S STEEL DOME FURNACE

FURNACES, COMBINATION, HOT WATER AND STEAM.

ALWAYS UP-TO-DATE.

Reliable, Economical, Best Known, Easiest Handled. A Postal Will Bring Full and Definite Information.

## The Boynton Furnace Co.,

207-209 Water St., New York

147-149 Lake St., Chicago

1903

# Royal Heaters.

MANUFACTURED BY THE

HART & CROUSE CO.

UTICA, N.Y.

ALL THE LEADING LINES OF

STEAM, HOT WATER & HOT AIR,

FOR HEATING ALL CLASSES OF BUILDING.

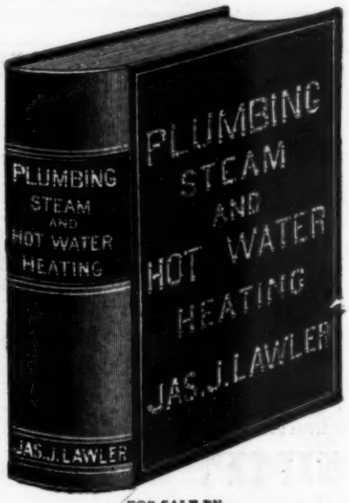
235 WATER ST. N.Y. BRANCHES. 79 LAKE ST. CHICAGO.

COLUMBUS. O. ST. LOUIS.

## Modern Sanitary Plumbing

**Steam and Hot Water Heating**

An Encyclopedia of Practical Plumbing. By JAMES J. LAWLER. 400 pages, large octavo. Size 6x9 inches. Price $5.00.




FOR SALE BY

DANIEL STERN,

69 Dearborn Street. CHICAGO.

# BRAND STOVE CO.

We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogue.

MILWAUKEE, WIS.

THE SALE OF THE

# TORRID ZONE FURNACE

during the first three months of 1903 has exceeded that of any other year in the corresponding three months by about six to one. If you are not on our list, you had better look us up and you will see what this great advance in the demand means.

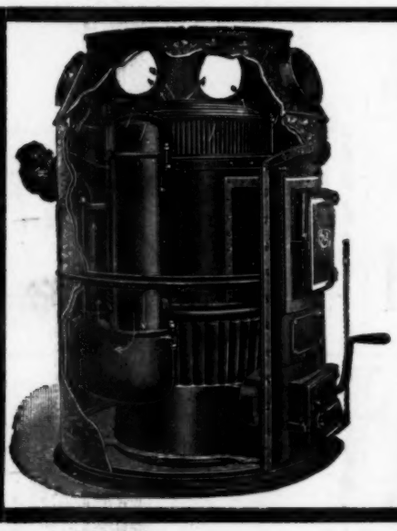
We are getting out a new Catalogue that has many things of interest in it for the dealer. They will be ready for mailing by the 20th of this month—free for the asking.

**Lennox Manufacturing Co.** Cor. Ninth Ave. and Frederick St., MARSHALLTOWN, IOWA.

**FARWELL, OZMUN, KIRK & CO., St. Paul, Minn., Northwestern Distributors.**

SCHLAFER HARDWARE CO
APPLETON, WIS.
WRITE:

"Please discontinue the "ad" in your paper in the Help Wanted column, as we have more applications now than we can answer."



# Can you afford

Mr. Dealer, to risk your business reputation by recommending cheap, inferior and unsatisfactory furnaces? Particularly as such a course is entirely unnecessary when you can secure an agency for

**Floral City Furnaces**

which are made with perfect castings by skilled workmen under careful supervision.

**Monroe Foundry & Furnace Co.**
Monroe, Mich.

## THE CROWN LOW DOWN FURNACE

**COMPETES WITH STEAM AND HOT WATER HEATING**

1st—In heating at long distance.

2d —In an economical consumption of fuel.

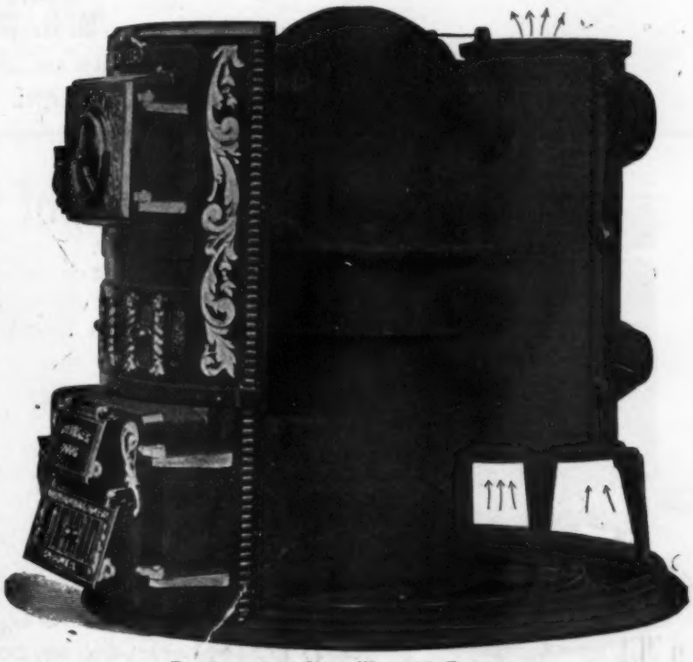
**OUR CROWN LOW DOWN FURNACE IS SUPERIOR TO STEAM AND HOT WATER.**

1st—In its simplicity of management, any ordinary help can manage this furnace.

2d —In its economy of repairs, repairs being only needed at long intervals, the skilled mechanic not required to repair this furnace.

3d —*Most important of all* is the purity of air supplied. It's the ideal sanitary house heating construction. Any one caring for the good health and comfort of the home should not fail to examine this furnace before installing any other system of heating.

**MARCH-BROWNBACK STOVE CO.**
POTTSTOWN, PA.



The Crown Low Down Warm Air Furnace.

Return Flue All Cast Iron.

# Mueller

## Furnaces and Boilers

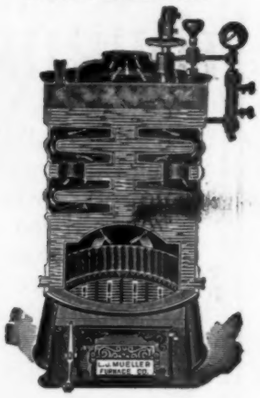
**BRING CUSTOMERS**

**TO DEALERS HANDLING THIS LINE**

**All Styles--For All Kinds of Fuel.**
**Get Our Special Register Offer.**

**EVERYTHING IN THE HEATING LINE.**

Portable Steam Boiler.



# L. J. Mueller Furnace Co.

**191 REED STREET, - - MILWAUKEE, WIS.**

---

**FOR**

**"GOODNESS" Sake**

**SELL THE**

# MONARCH AIR BLAST FURNACE

**ALL CAST FURNACE FOR ALL FUEL**

**COAL AND NATURAL GAS COMBINATION**

Write for Catalogue.

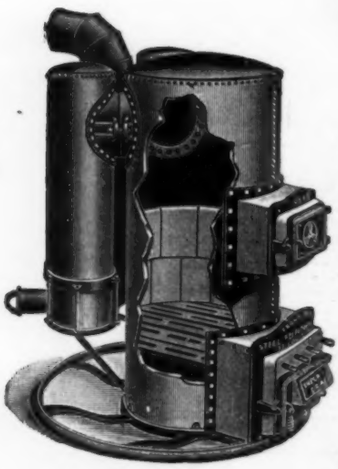
**The FOREST CITY FOUNDRY & MFG. CO.,**

**Winslow and Elm Sts., CLEVELAND, O.**

## Persistent Advertising

One who watches carefully the pages of general advertising mediums is struck by two things: the persistency with which those advertisers who are recognized as successful maintain their advertising week after week, month after month, and year after year; they never seem to abate their effort, and apparently the volume of their business increases steadily. The other thing noticeable is the large number of advertisers who thrust their announcements above the surface for a little while and then sink into oblivion. They either had not merit as a basis for their claims or they did not possess the skill to steer their enterprise successfully, or else they lacked the nerve to put forth proper effort.—[*Advertising Experience.*

---



# A Solid Sheet of Steel

That's what our fire chamber is.

It beats them all in durability. Our use of vertical lines in the **Front Rank Furnaces** brings the air in direct contact with the entire heating surface.

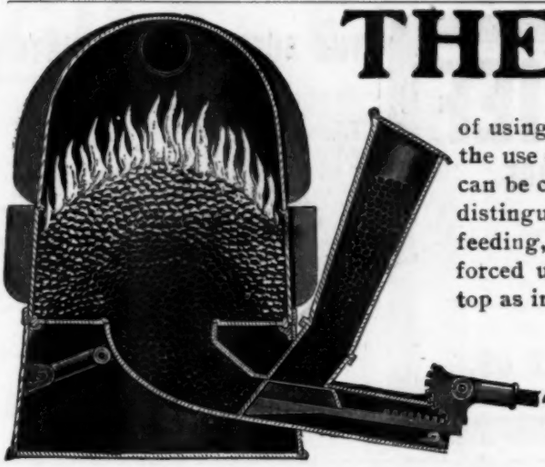
These furnaces burn hard or soft coal or coke. We also make wood burning furnaces.

Send for our catalogue, it will give you a better idea of what we make.

***FRONT RANK STEEL FURNACE CO.,***

***2301 to 2309 Lucas Ave., ST. LOUIS, MO.***

# THE PROBLEM



of using soft coal in furnace heating is successfully solved by the use of the **Underfeed Furnace** which gives a fire that can be compared very favorably with that of hard coal. The distinguishing feature of the furnace lies in the fact that in feeding, the coal is placed in a hopper at the side and is then forced up **underneath** the fire, instead of being thrown on top as in other furnaces.

**Write for Circulars,**

**THE WESTERN FURNACE & FOUNDRY CO.,** 1218 Harney St., Omaha, Neb.

# WEIR ALL STEEL GAS AND SOOT CONSUMING FURNACE.

**THE HEAVIEST STEEL FURNACE MADE.**

Absolutely Gas and Dust Tight. A Great Heat-Producer, but a Fuel Saver.

MANUFACTURED BY

**THE MEYER FURNACE CO.**

1300-1304 S. Washington St.,

*Send for Catalogue.* PEORIA, ILLS.

## "The HANDY FURNACE PIPE"

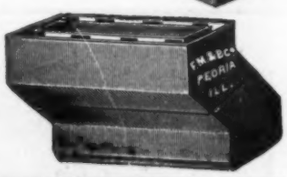
**Made with a View of Being Safe.**

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

MANUFACTURED BY

**F. MEYER & BRO. CO.**

*Send for Catalogue.* PEORIA, ILLS.



# EMPEROR FURNACES

**For Wood**

**SIMPLE SAFE DURABLE**

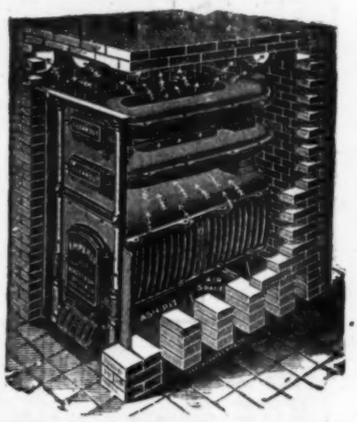
**The Best and Cheapest Line of Wood Furnaces**

**FURNISHED FOR EITHER BRICK OR GALVANIZED IRON CASING.**

**Send for Catalogue.**

*Bergstrom Bros. Co.*

**NEENAH, WIS.**



# We Invite You

**To examine the merits of this**

## Excellent Furnace.

The CHAPPELL is all cast iron.
The CHAPPELL burns long wood or coal.
The CHAPPELL has seamless radiators.
The CHAPPELL has long fire travel.
The CHAPPELL has only eight joints.

**WRITE FOR CATALOGUE.**

**The Chappell Furnace Co.,**
**MORENCI, MICH.**

# MONCRIEF

## WARM AIR FURNACE.

Specialties
- All Cast Iron.
- Moncrief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity. Durability. Economy, Cleanliness in Use.

**HENRY & SCHEIBLE CO.**
6-8-10 Long St., Cleveland, O.

## THE AUER WALL REGISTER

Perfected and Tested. Not an Experiment. The only one that has the cosey appearance of the fireplace. The only one that is practical for a foot warmer.

The only one that closes tight having no grating over front to catch dirt and dust.
Write for Catalogue.
**The AUER REGISTER CO., Toledo, O.**

TO OPEN, PUSH INWARD AT TOP.

# Symonds Wall Register

SEND FOR
**FREE SAMPLE**

**Symonds Mfg. Co.,** East St. Louis, ILL.

TO CLOSE, PUSH DOWN AT BOTTOM.

REGISTER OPEN

## THE CLEAR PATENT CONVEX CLEANABLE REGISTER

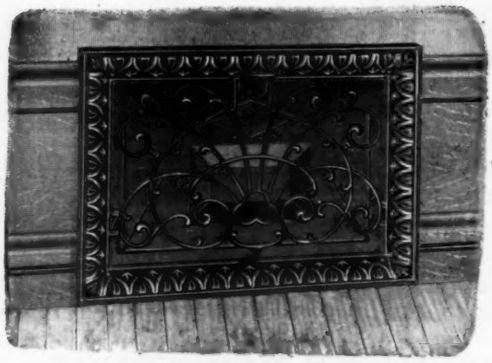
After five years' continued success and the demand always increasing (without the aid of advertising), proves the popularity of the Clear Register. No buncombe; no fad—but a register that fills all requirements and overcomes the most dangerous *obstacle* to hot air heating—*friction*, (which is too often overlooked by the average furnace man and theorist of the present day). No complaints about cold rooms where the Clear is used.

It is a money maker and a fuel saver.
Catalog and prices on application.

**CHAS. CLEAR,**
Patentee, U. S. and Canada,
Office: Broadway and La Salle
ST. LOUIS, MO., U. S. A.

REGISTER CLOSED

'TIS A CINCH THE . . . . . **MUELLER** WALL REGISTER SKIN ALL OTHERS



To Open, Push Down Lever with Foot.

In Simplicity, Durability, Ease of Installation, Capacity and Ornamentation, Its Superior Points are too Numerous to Mention. A Sample Will Demonstrate This.

Write for Prices.

To Close, Push Up Lever with Foot.

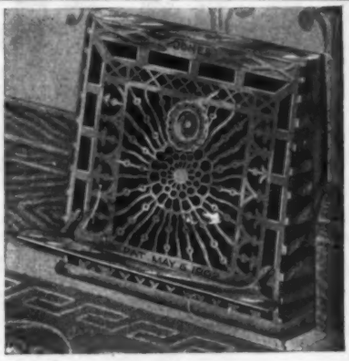
**L. J. MUELLER FURNACE CO.**
191 REED STREET. Established 1857. MILWAUKEE, WIS.

# GILT EDGE FURNACES

**THE MOST COMPLETE LINE MANUFACTURED FOR ALL KINDS OF FUEL. DURABLE, ECONOMICAL, GAS TIGHT.**

***The* Jones Side-Wall Register . . . . . .**

The only register having full capacity of hot air pipe for large living rooms or for heating a room on the first floor and extension to second. Has a face of neat design and not a hole in the wall when open. Has a regulator that holds the damper permanently in position. Can not get out of order. Double safety box included in each register.



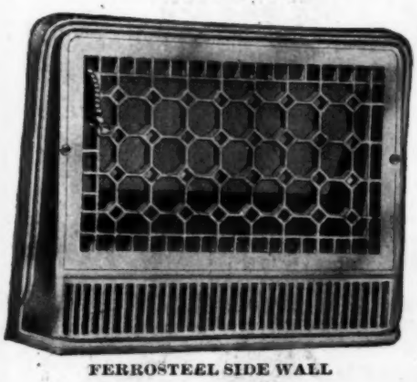
Send us sketch for plans of latest method of heating with *GILT EDGE FURNACES* and *JONES REGISTERS*, least work, least pipes, least waste of heat, most economical.

## R. J. SCHWAB & SONS COMPANY,

Manufacturers of Gilt Edge Furnaces and Northwestern Distributors of Jones Side-Wall Registers.

MILWAUKEE, WIS.

# FERROSTEEL REGISTERS

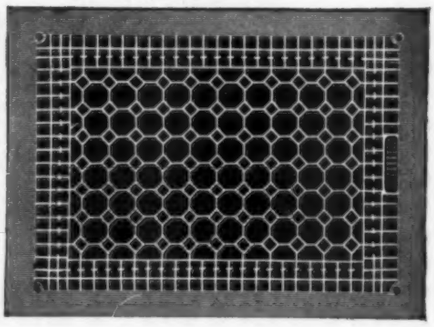


FERROSTEEL SIDE WALL

## WORK

**PERFECT MECHANISM**
**UNEQUALLED FINISH**

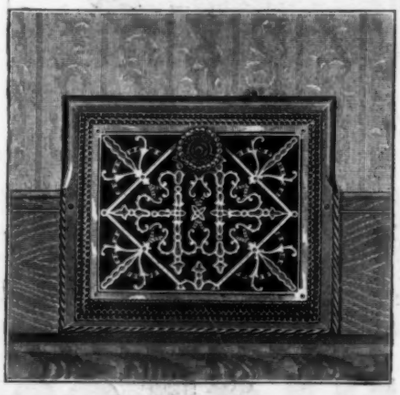
***PRICES LOWEST***
***TERMS LONGEST***
***STOCK LARGEST***



FERROSTEEL FLOOR

## FERROSTEEL COMPANY, CLEVELAND, OHIO.

# STOWELL SIDE WALL REGISTERS



**THE LATEST AND BEST**

**Beautiful Design**
**Perfect Ventilation**
**All Finishes**
**All Sizes**

Furnished with or without pipe

**ADVANTAGES**

Air tight.
No discoloration.
Noiseless.
Largest air capacity.
Ventilates both floors.
No cutting of carpets or floors.
No dust.

Address Register Dept.

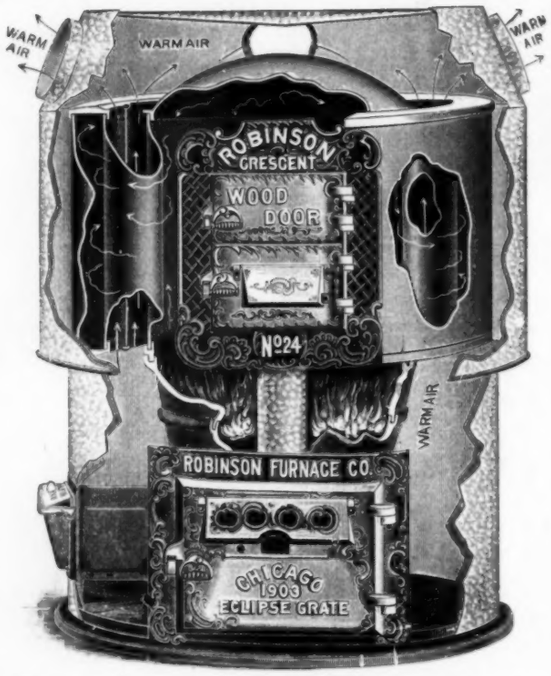
**STOWELL MFG. & FOUNDRY CO.,**
South Milwaukee, Wis.

**R. W. BROKOPP, Medford, Wis., writes:**

"I should not be without THE AMERICAN ARTISAN even if you asked twice the price."

HEAT LIGHT
FOR THE
HOME
STORE
HOTEL
SCHOOL
CHURCH
OFFICE
COLLEGE
THEATRE
FACTORY
VILLAGE
INFORMATION FREE
SEND FOR IT.
DETROIT HEATING AND LIGHTING CO.
DETROIT MICH.

# ROBINSON'S
# WARM AIR FURNACES




## The Robinson Crescent

is a new addition to our Celebrated line of furnaces for 1903. This furnace is made with a crescent, or horse-shoe flue, and has a large combustion chamber. The fire-pot is corrugated in two sections.

The Eclipse Grate, which has become so popular, is supplied with this furnace. This type of furnace is sure to be a good seller where a heater is wanted which is lower in price than our regular Tubular Furnace.

## Robinson Tubular Furnace

for hard coal, with boiler flues in radiator exposed. The arrows indicate which way the smoke goes after it leaves the fire pot on its way to the chimney. The fire travels farther in our Tubular Furnace than in others, and this adds to the heating capacity, also reduces coal bills.

Notice main damper in smoke-box. The damper can be opened when starting a new fire, or when reviving an old one, but is at all other times closed, thereby forcing combustion twice around radiator.

# ROBINSON FURNACE CO

**107-109 Lake Street : CHICAGO, ILL.**

ESTABLISHED 1874

**The Largest and Most Reliable Foundry Supply House in the World**

**MANUFACTURERS**

"Everything you need in your Foundry."

# THE S. OBERMAYER CO.

**CINCINNATI**
**CHICAGO**
**PITTSBURG**

MANUFACTURERS
**HIGH GRADE FOUNDRY FACINGS AND BLACKINGS**

IMPORTERS AND REFINERS
**CEYLON PLUMBAGO, GRAPHITE**

BUILDERS
**MODREN FOUNDRY EQUIPMENTS**

DON'T FORGET THE OLD RELIABLE

XXX HEAVY STOVE PLATE FACING,
OBERMAYER FIREPROOF FACING,
NATIONAL RETURN FACING,
PREPARED CHARCOAL FACING,
ALSO
ESSO ONE BAG STOVE PLATE FACING.

# ROUND OAK
## STANDARD of AMERICA

Niagara: The Horse Shoe Falls

Doe-Wah-Jack is reminded of Home

A well known Minnesota hardware and stove dealer said — at the Minnesota Retail Hardware Dealers' Association: "I wish I had commenced to handle the genuine Round Oak stove years before I did if for no other reason than this — I can load a Round Oak to go ten miles in the country by simply putting it in the wagon and taking off the urn, and know positively that it will reach its destination just as sound as it left my store. The other Oaks I sold had to have the legs taken off and be completely knocked down and carefully packed in hay or straw and even then I had breakage," etc. If the town you live in has no agency for Round Oaks why not give them a trial? Everybody knows they are the best and cheapest, and if you take them up so will you.

## Estate of P. D. BECKWITH

Dowagiac, Michigan

Makers of Good Goods Only

45

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS, AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.
Address all Letters, communications and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, MAY 9, 1903.

IN ONE day during the week ending April 25 the patent office granted no fewer than 592 patents, of which 511 were to citizens of the United States and 81 to foreigners. Among the foreigners taking out patents residents of Germany and England are in the lead. The issue of this large number of patents at one time furnishes an indication of the growth of the business of this bureau of the federal government in an inventive age. There have been fluctuations in the development of the business of the office, but, taking it over long periods, the growth has been constant. The beginnings were modest. In 1840 only 473 patents are recorded as being issued. Ten years later 993 patents were granted. In 1860 the number had increased to 4,778. After a temporary decline in the period of the civil war the statistics again took an upward turn, and in 1870 13,333 patents were granted. In 1880 the number was but slightly larger—namely, 13,947. In the decade following there was a marked increase, and in 1890 26,292 patents were granted, nearly twice as many as in 1880. There was a recession from these figures for several years, the low point for the closing decade of the century being in 1894. The year 1900, however, saw the point reached in 1890 passed by a small margin, the number of patents issued being 26,499. The patents issued in 1902 numbered 27,886, the largest total in the history of the patent office.

R. T. CRANE of the Crane Co., Chicago, is out with a large hammer for the "Rah-Rah" boys. He is the author of a 110-page book entitled "The Utility of an Academic or Classical Education for Young Men Who Have to Earn Their Own Living and Who Expect to Pursue a Commercial Life." Mr. Crane says:

"I take the ground that a young man who goes to college not only is not benefited by it, after spending seven years in time and $10,000 to $12,000 in money, but is most decidedly and positively injured by the college, since he comes out so conceited that he is at a great disadvantage in getting into business, and it takes years, and sometimes a lifetime, to get his head back to a normal size."

This booklet is characterized by a crusty sourness and whatever point it has is blunted by the prejudice which crops out on every page. No fair-minded opponent of higher education would state that it costs $10,000 for a youth to tread the halls of *alma mater*.

The fact is, of course, that any attempt to estimate the college man in business is seriously hampered by the cross circumstance that until recently an overwhelming percentage of college men—and a more than overwhelming percentage of the most intellectual of those men—entered professional and not commercial life. Only a few went into business. Yet even among the few there were men who possessed and displayed unusual business capacity.

The careers of J. Pierpont Morgan, Stuyvesant Fish, Geo. Gould, Wm. K. Vanderbilt and many other captains of industry belie Mr. Crane's sneering creed. The hardware and stove world is full of men who have ridden Alpha Sigma Sigma goats and "flunked" in quaternions, and these men are not on the bottom rungs of the commercial ladder either.

**Those Posted Lists.**

NOT everybody is pleased by the recent extensions of the rural free delivery service by the Postoffice Department. According to protests and complaints received at the office of the postmaster-general lately, the posting of lists of rural delivery routes and of addresses of patrons along the lines has been working detrimentally to the business of country stores. It appears that these lists are being copied by agents of firms that do a large business on mail orders, and the information thus gathered is used in sending out descriptive catalogues and circulars.

Bradstreet's in a recent issue says: "It seems clear that the mail-order business of the country is increasing in a marked way, and the complaint is made that a considerable part of this growth is at the expense of the country stores, which find it difficult to compete with the big concerns in the large cities. The postmaster-general was lately asked to countermand the order compelling the posting of the lists, but he declined to do so on the ground that the order was necessary to reduce confusion in the conduct of the business of the department, and so the matter stands for the present."

It is possible that we are numskulls, but we cannot get it through the osseous matter adjacent to our brain cells why the furnishing of names of rural delivery patrons to the agents of mail-order houses is "necessary to reduce confusion in the conduct of the business of the department." If we were the incumbent of the Hickoryville postoffice we would certainly make a list of all patrons of rural delivery routes, but it would be a private list kept under lock and key in an inner drawer and accessible only to ourselves and the carriers when necessary.

The only plausible explanation of this strange attitude of the postmaster-general is that his ear has been seized by the oily agents of the Chicago trade trusts,

who have murmured therein, "Mr. Postmaster, when we have imperfect addresses for our country patrons don't you see it makes 'confusion' in sending them our valuable and bulky reading matter? Now if you would only issue an order that the names of patrons on each rural delivery route be posted where our young men can have access to them the postoffice could handle our immense mail so much easier."

The policy of this paper has ever been a straightforward one. We have ever spoken regarding facts and have not bothered our heads concerning vague innuendoes or fleeting rumors. In the present case we will depart from this rule to merely remark in passing that there are numerous hints floating around to the effect that a scandal of marvelous proportions is about to crop out in our postoffice department. Furthermore, we have seen a statement in print to the effect that if all the cesspool of bureaucratic corruption were brought to the light by a thorough investigation it would be shown that leading postoffice officials stand in with agents of the Chicago mail order houses.

These are but idle insinuations. However, no observer of commercial conditions can deny that the catalogue houses are trying in every way to make the postoffice department a vehicle for the furtherance of their schemes to undermine the retail trade of the country. The spectacle of Uncle Sam pulling supply house chestnuts out of the fire is as humiliating as it is unjust and as undignified as it is discriminative.

If the present postmaster-general could conjure up a petty "confusion" as a cloak for turning down the requests of legitimate merchants at the behest of a couple of mail order houses it would appear that we might just as well make a clean sweep when we were about it and have a new postmaster-general as well as a new attorney-general for the postoffice department.

Tear down those posted lists, Mr. Payne.

## RANDOM SKETCHES.

BY SIDNEY ARNOLD.

For a number of years a leading Minneapolis retail jeweler used to visit Chicago to buy goods. He always turned up at a certain wholesale jewelry house and was handed over to one of the salesmen, who would take him to a ball game in the afternoon, a nice dinner afterwards, then the theatre, followed by a supper with champagne *ad libitum,* and then a cab ride into the shadows of a great city. Next day the Minneapolis man would order $1,000 or $1,500 worth of goods from his friend the salesman, and the latter would turn in an expense account of anywhere from $30 to $50, which was paid without question. Well, one day the wife of this jeweler hired a private detective, and he reported how many bottles of Pomeroy Sec were drunk at supper, and also the route of the cab with its various stoppages, length of each stoppage, etc. The lady laid this evidence before the head of the wholesale jewelry house in question, and that moral man, being deeply shocked, promptly discharged the offending salesman.

In my opinion this was pure hypocrisy. Not being an incarnate idiot, the president of that jewelry jobbing concern knew where that expense money went, although his wise refraining from asking for detailed statements made him technically innocent.

Other jobbers do not try to shield themselves by making scapegoats of their employes, but boldly protest against any reform movement which looks to cleanse the Augean stables of metropolitan vice on the ground that if a wave of social purity were inaugurated there would be no place for them to take their country customers. This excuse, I fear, is somewhat analogous to that given by little Johnny's parents for going to the circus.

Perhaps it would be pertinent to ask if the outside merchant really desires Perfectos and Martini cocktails, Philadelphia capon and red lights, baseball games and vaudeville when visiting a great city. I personally know many dealers whose good opinion I could not hold if I should even hint on a visit to the cesspools of city life. I know of many others who on their business visits to a city expect to be entertained, but are coerced into false pleasures by a desire that we all have not to spoil sport.

But while the jobbing house are lavish in entertainment; while they see that their country customer has cigars, drinks, food and pleasures of all kinds to the limit, are they not in many instances lacking in extending the common, but no less priceless courtesies of commercial life?

Have not many retailers visited jobbing houses where they run large accounts, and been obliged to wait, 10, 20, 30 or even 40 minutes before some underling would come along and ask what was wanted? When, after another delay, when a salesman has been secured, is it not often a green man who does not know just what a retailer wants to learn when he goes to market?

Has not civility a commercial place even before entainment.

Is the latter really essential?

Does not discourtesy in the jobbing house counteract the traveler's best endeavors?

* * *

Every once in a while the question of the 45 year age limit bobs to the surface. Is the employer placing the buoyancy of young blood on a higher plane than the experience and judgment of gray hairs? Yes and no. The ambitious young man with enthusiasm tingling in every vein is naturally preferred to the elderly cynic whose life is *nil admirari* epitomized. There is a market for evaporated apples, but not for evaporated enthusiasm. On the other hand, the man advanced in years who keeps himself up to date, aggressive and progressive does not find the age limit a problem of any great seriousness.

* * *

An important decision on commercial slander has been handed down by the Kentucky Court of Appeals. A farmer having some wheat to sell was approached by a miller, who asked him what he wanted for his wheat. He replied: "I won't price it until I see Fred, as I have given him the refusal of it." The miller then said: "Well, you won't want to price it

to Fred but once if he beats you out of as much as he beat me out of; he just beat me out of $1,100 in three months." The court declared that a miller buying grain and selling his products cannot exist without the confidence of his customers. He must have credit or his mill will be deserted of trade. The strenuous character of the competition into which merchants are sometimes forced causes them to make damaging statements concerning their competitors, and this decision should act as a warning to those so disposed not to step over the limits of legitimate competition.

* * *

THERE will, as a matter of course, be a number of empty chairs at the forthcoming meeting of the National Association of Stove Manufacturers in Cleveland, May 12-14. Some will be kept away on account of business, others through sickness, and a very few possibly on the grounds of expense. One stove man will keep away for quite a unique reason. He happens to be a defendant in a legal action brought by an Ohio man. This suit is, of course, being fought in the courts of the state where this prospective absentee resides. According to the laws in vogue in this absentee's state he will probably win this suit, but if it should be tried under Ohio laws he is up against it. Consequently he fears that if he should show up in the corridors of the Colonial next week his shrewd Buckeye opponents will annul their proceedings in his own state and secure service on him in their own commonwealth.

* * *

EVERYTHING is being systematized, and even salesmanship is becoming a matter of calculated study. The old-time days when the trade missionary went forth and grappled with the trade according to his original notions have gone, and a regime in which the traveling man's habits are prescribed takes its place. In speaking about the traveling man of to-day the Boot and Shoe Recorder says: "As for personal habits, one of the biggest concerns in the country insists that its representatives must be neatly and stylishly dressed, must stop at the best hotels and must shave every day. The detail of shaving shows how particular the concern is. A successful drummer in the leather trade makes a point of buying a new necktie each week, and another man who travels much in Michigan wears patent leather shoes because he can quickly brush the dust off them and make them neat and shiny."

* * *

"WHATEVER your occupation may be, and however crowded your hours with affairs, do not fail to secure at least a few minutes every day for refreshment of your inner life with a bit of poetry," says Charles Eliot Norton, and in order that the hardware world can have "refreshment" I have granted permission to THE AMERICAN ARTISAN from time to time to publish selections from my unparalleled collection of hardware poetry. The "refreshment" afforded by the following gem is, I fear, something on the *pousse cafe* order, and I think the Internal Revenue Department ought to tax the Avery Stamping Co., Cleveland, O., at least $5.00 per gallon for this poetical output of theirs:

**"A-VERY" FOXY FABLE.**

To "cook his goose" for evil deeds
Yet cater to their stomach's needs,
Witch Rabbit brains this plan did brew,
To do the matter through and through.
The proper course they found to take
Was with the Brand of "NEVER-BREAK"
Cooking utensils stamped from Steel,
Of make so Strong, they could but feel
The perfect outcome of their plan,
With the best "Utensils" made by man.

* * *

I AM thinking of quitting my job and branching out in a new line of business endeavor suggested to me by a friend of mine in a wholesale hardware house. He says his concern frequently receives letters like this:

Podunkville, O., May 5, 1903.

——— Hardware Co.,

Gentlemen:

Your valued favor of May 4 asking why I have not remitted for March statement at hand. In response would state that my bookkeeper has been sick and the matter was overlooked.

Very truly yours,

H. BUTTSNAIL.

This ill health of retailers' bookkeepers being so common a disease, I have concocted a remedy therefor styled the ARNOLD BOOKKEEPERS' INVIGORATOR. While it will not cure all ills that bookkeepers are addicted to, it is guaranteed to keep them sufficiently healthy to check up all wholesale bills before they take to their beds for one of their frequently recurring spells of sickness. This new medicine is a swell present for wholesalers to give their retail friends. Price, $1 a bottle, or six bottles for $5.

Another remedy I am working on is the ARNOLD GRANDPARENTAL PRESERVATIVE. Every employer knows how many employes are forced to leave work during the baseball season on account of the funeral of grandparents. When one of these ancestors becomes woggly early in the week a few injections of PRESERVATIVE will keep life going until Friday morning, enabling the family to hold the funeral on Sunday and make an enforced holiday unnecessary. Price, including syringe for injection, $1.75.

Several leading hardware jobbers, on learning that I was going into the patent medicine business, have asked me for a remedy for the retailer who has a "hobby" for round numbers, and who, if he owes $75.19 or $75.31, will just make it even $75.00 for good luck. This round number rule, however, only works on a declining scale, as, if he owes you $75.88, he never sends you $76.00. Perish the thought. I have answered all these requests by referring questioners to American Axe & Tool Co., Pittsburgh, Pa.; Findlay Axe & Tool Co., Findlay, O.; Kelly Axe Mfg. Co., Alexandria, Ind.; Mann Edge Tool Co., Lewiston, Pa.; Fayette & Plumb, Philadelphia; Warren Axe & Tool Co., Warren, Pa., and the Romer Axe Co., Dunkirk, N. Y., as no other remedy for this evil is so effective as a good axe strenuously applied to *the medulla oblongata.*

# News Siftings.

The Eagle Mica Co., are a new Indianapolis, Ind., concern capitalized at $50,000.

The Superior Mica Co., are a new Bloomsburg, Pa., concern capitalized at $500,000.

The Chicago Malleable Steel Range Co. are a new Chicago concern capitalized at $60,000.

The United States Steel Corporation are now busily engaged in arranging their price schedule for the year 1904.

It is said that a foundry for the manufacture of stove fittings will shortly be erected at Point Richmond, Cal.

The Ramsey Stove Foundry having received a bonus of $30,000 and five acres of land are removing their plant from Charleston, Ill., to Mattoon, Ill.

The Indianapolis Sentinel of May 5 states that 200 employes of the Home Stove Co. of that city have gone on a strike for a 10 per cent advance in wages.

At a meeting of the directors of the United States Steel Corporation, held in New York May 5, Chas. M. Schwab was unanimously re-elected as president.

An important victory has been won for the cause of organized labor, as within a few days past Buck's Stove & Range Co., St. Louis, Mo., decided after protracted deliberation to unionize their shops.

The Home Stove Co., Indianapolis, Ind., have made an agreement with their metal polishers and buffers by which they agree to pay an increase of 15 per cent and to employ only union labor for the coming year.

The Joliet Stove Works, Joliet, Ill., have just completed a five-story brick warehouse, 80x130 feet in dimensions. This building is fitted with fireproof windows and doors, and is of the latest improved construction.

The Stove Salesmen's Association of Pennsylvania held a special meeting on April 24th at the office of the Mt. Penn Stove Co., in Philadelphia, and appointed a committee to arrange for a planked shad dinner at the Pavonia Boat Club House, Pavonia, N. J., on or about June 1st.

The Southern Stove Works of Evansville, Ind., who have occupied a prominent position in the stove world for a number of years, have been recently incorporated with a capital stock of $200,000. The directors of this concern are Abe Straus, August Brentano, Nestor Brentano, Edward Kiechle and Mary Kiechle.

On April 26th, the plant of the St. Louis Enameling Co., 9th and Monroe streets, St. Louis, Mo., was gutted by fire. Practically all that was saved was the entire outfit of patterns for the Artistic enameled steel ranges of this company. This firm will rebuild at once, and expect to be turning out goods in about a month.

The Black Silk Stove Polish Works, Sterling, Ill., offer the trade a variety of desirable polishes, including the Black Silk steel range gloss, which is designed for grates, fenders, mantels, stove pipes, heating drums, registers, coal hods, sinks, oil stoves, gas stoves, etc. It will stand any degree of cold without chipping and is not affected by heat unless the article painted is brought in direct contact with flame heat.

The Belleville Stove Works, Belleville, Ill., makers of the well-known St. Clair stoves and ranges, are offering the trade a very complete line the coming season. These include the St. Clair steel ranges, air tights and some attractive cooks. Their new 1904 catalogue will be ready for issuance to the trade about June 1, and dealers are requested to write them for same. When writing kindly add: "Saw it in THE AMERICAN ARTISAN."

We are advised of the appointment of Charles L. Jeffrey to the position of sales manager of the Scranton Stove Works, with headquarters at Scranton, Pa. Mr. Jeffrey entered the employ of the Scranton Stove Works when he was a boy about seventeen years ago, and has worked his way up through nearly every department of the works and office, and has also served as traveling salesman. Mr. Jeffrey has been a stockholder and director for several years and is to be congratulated on his further advancement.

On April 25th the stockholders of the Faultless Mfg. Co., 617 Austin Av., Chicago, held a meeting and increased the capital stock of the company from $20,000 to $50,000. At the directors' meeting, held April 30, the following officers were duly elected to serve for the year 1903: Benjamin W. Dodson, president; William B. Ullmann, vice-president; Frank I. Pearce, treasurer; Edward F. Gorton, secretary; David M. Flynn, general superintendent, and a new board of directors was duly elected as follows: The five officers named above and Edwin F. Daniels, Chicago.

T. P. Kelly & Co., manufacturers of black leads, foundry facings, supplies &c., have been enjoying a most active trade and have been forced to enlarge their New York office. In addition to Nos. 544 and 546 West 22d St., they are now occupying the adjacent premises, viz., No. 542. This gives them a space 75x100 feet. They have the best of railroad facilities and are making prompt shipments to the trade. Their Chicago office is located at 30 E. Huron St. This firm have recently opened a new mill near a breaker in the vicinity of Mauch Chunk, at Nesquahoning, Pa., which is equipped with every modern improvement. It is under the management of T. T. Hoffman of this firm, a practical facing man and an authority in the foundry supply line.

## BEASTS OF BURDEN.

The llama laboriously traveling over the crags of the Andes or the dray horse hauling coal through the alleged thoroughfares on almost any metropolitan outskirts; the jinriksha man in far-off Japan or the Neapolitan harridan swaying under a load of faggots, are all classed as beasts of burden. A little booklet sent us by Pawling & Harnischfeger, Milwaukee, Wis., shows us another kind of beast of burden styled a traveling electric hoist, which carries ladles, castings, cores and flasks, loads and unloads freight cars, handles sheets or rods, runs on errands to the pattern room, carries coal, empties the ashes, etc. The trade

will find this an interesting brochure. When writing to the manufacturers they should kindly add: "Saw it in THE AMERICAN ARTISAN."

## NEW SUNLIGHT BURNER.

The Sunlight Lava Mfg. Co., Chattanooga, Tenn., are offering the trade the new Sunlight burner shown in the accompanying cut. This burner consists of a rolled brass pillar provided with short, straight stout arms, and is heavily nickel-plated. There are Steatite tips in the arms and these are carefully and uniformly turned, milled, mounted and dulled and are so fastened that it is difficult to remove them without breaking. The burner is small, being the size of the cut shown herewith and is quite attractive in appearance.

New Sunlight Burner.

## BY THE BASCULE BRIDGE.

The bascule bridge across the Chicago river at Randolph street is now open and the trade will find it very easy to get to Butler Bros.' mammoth establishment, where all kinds of hardware and tinware are jobbed to the trade.

## MANY DISPUTES HAVE BEEN SETTLED.

The officers of the stove associations have been extraordinarily busy the last fortnight. They have had conferences over labor disputes in the Schuylkill Valley—particularly in Philadelphia and Reading—Geneva, Indianapolis and St. Louis. Nearly all these disputes have been satisfactorily adjusted, which speaks volumes for the tact and fairness of the officials in question.

## A RALLYING COMMITTEE.

Gotham stove men will turn out *en masse* for the forthcoming Forest City stove convention. A New York District Rallying Committee has been formed, composed of Wm. J. Myers, chairman, New York, N. Y.; Eugene Munsell, New York, N. Y.; C. D. Sheppard, Peekskill, N. Y.; Edward F. Hill, Peekskill, N. Y.; E. B. Colby, Jersey City, N. J.; A. L. Canfield, New York, N. Y.; Geo. W. Butcher, New York, N. Y.; E. E. Dickinson, New York, N. Y.; John B. Frazer, New York, N. Y.

The committee is charged with the task of rallying not only the members of the association, but also to solicit the presence of non-members in that district at said meeting.

All indications point to a very large attendance, and all are assured of a good time, as the entertainment committee appointed by President Parlin has already made provision for giving the stove men, as they term it, "the time of their lives." Special arrangements have been made for the care of any ladies who may attend.

In a notice sent out by this committee they say that "It is sincerely hoped by this committee that every stove manufacturer and wholesaler in New York City district who can will lay aside business affairs for two or three days and meet with their fellow-manufacturers from all over this great country for an exchange of views upon subjects close to the hearts and minds of all interested in the stove industry, the discussion of which cannot fail to be of profit and benefit to all, as well as for the advancement of this important industry."

## LITTLE METAL SPECIALTIES OF MERIT.

The J. L. Clark Hardware Co., Rockford, Ill., send us a dainty booklet showing some of their specialties. Their Gem flue stoppers have four points of contact in the flue. The No. 1 Gem is finished in a delicate gray Japan and has a patent wire fastening. The No. 2 Gem is embossed in a highly artistic design and finished in a beautiful brass lacquer. At the center of each Gem flue stopper an ornamental landscape design is glued.

In the No. 3 Gem the patent wire fastening is secured to the blank by means of sockets raised from the metal of the blank itself.

The Gem flour sifter has a removable agitator which permits the goods to be closely nested for shipment.

The Clark crispy toaster is a patented device, presenting novel features of merit.

## FLASKS AND CUPOLAS ARE IN MAIN AISLE OF ANNEX.

When the stove manufacturer puts his market basket on his arm and goes shopping for foundry supplies he can secure anything he desires from the S. Obermayer Co., Cincinnati, Chicago and Pittsburg. They handle everything needed in the foundry and the stove maker as soon as he steps into their handsome store is met by an affable floorwalker, who will direct them to the XXX heavy stove plate facing counter; or the aisle where their clerks will show you Obermayer fireproof facing or prepared charcoal facing. Their Esso one bag stove plate facing is in the second aisle to the right.

This description of this firm's goods has been a poor attempt to be humorous, but the point cannot be too strongly emphasized that just as the modern department store carries everything needed in the home, so this concern carries every last odd and end needed in the foundry. Whether the store man wants foundry facing, Ceylon plumbago, flasks or what not, this concern can supply him.

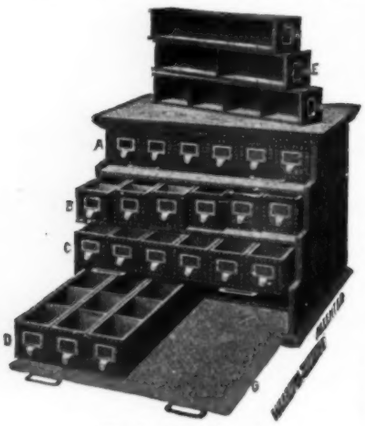
## SCHEDULES OF SUPPLIES ISSUED BY NAVY DEPARTMENT.

The Bureau of Supplies and Accounts of the Navy Department has issued a schedule of supplies combining the requirements of all the eastern navy yards at the present time in order to give bidders the opportunity of competing for deliveries at all yards, as well as at one, at the same time and under one proposal. Heretofore the general practice has been to issue a schedule for each yard separately. By combining purchases as far as practicable it is hoped to secure a

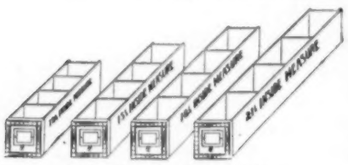
broader field for competition. All proposals issued by the department contain full information, specifications and instructions to intending bidders. While they provide for a guaranty to accompany the bid to cover execution of contract in case award is made, upon furnishing satisfactory assurances concerns are permitted to file a general guaranty covering all bids which they may submit, and thus avoid the formality of securing the execution of a separate guaranty for each proposal. Bids are opened and recorded at stated times at the Navy Department, Washington, the next opening of a general proposal for supplies being at noon, May 19. Blank schedules upon which to make bids may be obtained on addressing the purchasing pay offices of the navy, situated in all the principal seaport cities, or the Bureau of Supplies and Accounts, Navy Department, Washington, D. C.

## A PRACTICAL HARDWARE CABINET.

The J. D. Warren Mfg. Co., Chicago, have recently added to the line of goods of their manufacture the hardware cabinet shown in the accompanying cuts. A feature of this latest addition to their line is an ingenious device by means of which all drawers resting on a shelf can be instantly drawn out together, enabling the different styles or patterns in the compartments of that space to be seen at once, as in Fig. D and G. When one desires a specified article only the drawer which contains it need be drawn out. This cabinet is a design with drawers varying in length, also with a neat and practical form of drawers arranged in step or oblique form, giving a diversity in the length of drawers, thus being adapted to certain classes of goods that increase in size as the number advances; for instance, screws, for which it provides 96 spaces for that number of full packages of standard assorted sizes, also bright wire goods, stove bolts, rivets, etc. By removing part or all of the partitions in a drawer, as in Fig. E, these drawers are equally practical for files, chisels, augers and any goods of like proportions, as well as being suitable spaces for many articles of builders' hardware, not overlooking various classes of brass, steel and bronze butts. The drawers are 4 inches high, by 4 inches wide, varying in length from 14 to 23 inches, and are divided into four spaces with partitions, which can be removed at will. The cabinet is 26 inches long, 21 inches high, 18 inches deep at top, 26 inches deep at bottom and is finely made in light antique oak.



Hardware Cabinet.


Arrangement of Drawers.

## WILL MEET AT THE GRAND UNION HOTEL.

C. B. Carter, secretary of the Southern Hardware Jobbers' Association, Knoxville, Tenn., advises us that the thirteenth annual meeting of this association will be held July 14-17 at the Grand Union Hotel, Saratoga Springs, N. Y., and that indications point to a very large and successful meeting.

## WHY JOBBERS SHOULD PATRONIZE INDEPENDENT MAKERS.

To The American Artisan.

We notice in your issue of May 2, page 15, an article in regard to the shovel situation. It does look to us as if a large number of jobbers were having a tin tag labeled "Rebate" so close to their eyes that they fail to see their own interests to break loose from trusts and purchase from independent manufacturers of shovels. We find, however, some true Americans who believe they have a right to buy goods wherever they see fit, as we are enjoying a very large sale of our line of "Never-Break" goods. We are making a full line of hollow-back shovels, spades and scoops, also our patented plain-back shovels and spades, which latter articles are meeting with universal favor, owing to their construction, which makes them the strongest possible to produce. All our goods are high grade in every respect. We offer them as being at least equal in style, finish and wearing quality to any similar product on the market without exception, and are in position to make prompt shipments. Jobbers can buy from the independent makers at as low a price as those offered by the association. They would have this advantage, however, that there would be no strings tied to the transaction. After the goods are paid for that would end it and the jobber would be free to buy of the same parties or others without penalties being held over their heads for so doing. None of us like to be forced to do things, as we all know the old saying: "You can lead a horse to water, but you cannot make him drink." The Avery Stamping Co.

Cleveland, O., May 6, 1903.

## OIL CANS.

The Rockford Can Co., Rockford, Ill., send us a catalogue showing their line of oil and shipping cans. Their wood jacket cans are encased in well seasoned basswood jackets, which are easily removed when the can needs repairing. The 5 and 10-gallon sizes have the improved vent so constructed at the opening of the nozzle that only one cork is required to close nozzle and vent. Their Eagle oil tanks are made of heavy galvanized iron, double seamed and heavily soldered. The hoods are made of heavy tin and are painted. A wooden bottom protects the metal one from rust and injury. The tank is provided with a steady stream force pump, which is removable. One of these catalogues will be forwarded the trade on application. When writing for same kindly add, "Saw it in The American Artisan."

R. A. Marshall of the Marshall-Wells Hardware Co., Duluth, Minn., is at present on the Pacific coast.

# The Hardware Record.

**American Hdw. Mnfs. Assn.**
Pres., F. R. Plumb, Philadelphia.
Vice-Pres.—F. S. Kretzinger, Ft. Madison, Ia.; J C. Birge, St. Louis. Geo. W. Corbin, New Britain, Conn.
S.-T., F. D. Mitchell, Pittsburg.
Ex. Com., Robert Garland, Pittsburg; Henry B. Lupton, Pittsburg; N. A. Gladding, Indianapolis; W. S, McKinley, Allegheny; F. L. Clark; Birmingham; C. W. Asbury, Philadelphia; G. N. Landers, New Britain; C. H. Holt, Cleveland.

**Arkansas Retail Hdw. Dealers Assn.**
Pres., John M. Pitman, Prescott.
1st V.-P., J. F. Maxey, Ozark.
2d V.-P., T. B. Stewart, Newport.
Sec., C. E. Taylor, Little Rock.
Ex. Com., H. Williams, Hot Springs; J H. Boleourt, Little Rock; E. E. Mitchell, Morrilton; W. M. Graham Clarendon; R. F. Roys, Russellville.

**Chicago Retail Hdw. Dealers' Assn.**
Pres., D. McLaughlin.
V.-P., H. E. Gnadt.
Sec., G. R. Lott.
Collector, John Hora.
Treas., J. L. Smith.

**Hardware Merchants' and Manufacturers' Assn. of Philadelphia.**
Pres William C. Peters.
V.-P., Thomas Devin.
Sec.-Treas., T. James Fernley
Directors, W. W' Supplee, H. McCaffrey, E. S. Jackson, W. C. Peters. S. Disston, E. Fisher, J. H. Ritter, T. Devlin, T. J. Fernley.

**Illinois Retail Hdw. Dealers' Assn.**
Pres., Charles H. Williams, Streator.
V.-P., W. T. Gormley, Chicago.
Sec., L. Nish, Elgin.
Treas., Geo. A. Engelhardt, Chicago.
Ex. Com., Charles H. Williams. Streator; W. T. Gormley, Chicago; L. Nish, Elgin; Geo. A. Engelhardt, Chicago; William Bittel, Peoria; F. F. Porter, Chicago; H. G. Cormick, Centralia; H. N. Murphy, Galesburg; C. Mauer, E. St. Louis; R. G. Scheurer, Vandalia.

**Indiana Retail Hdw. Dealers' Assn.**
Pres., E. M. Bush, Evansville.
1st V.-P., A. N. Shidler, So. Bend.
2d V.-P., W. B. Shipley, LaFayette.
Sec., M. L. Corey, Argos.
Ex. Com., M. L. Lewis, Marion; W. P. Lewis, New Albany: Charles Boonshat Petersburg; E. M. Bush, Evansville; M. L. Corey, Argos.

**Indian Territory Retail Hdw. Assn.**
Pres., J. G. Smith, Canadian.
1st V.P., Fred Parkinson, Wagoner.
2d V.-P., E. C. Stretch, Vinita.

**Iowa Retail Hdw. Dealers' Assn.**
Pres. S. R. Miles, Mason City
V.-P., L. Lindenberg, Dubuque.
Sec., H. S. Vincent, Ft. Dodge.
Treas., A. C. Vieth, Oakland.
Members Exec. Com., Jacob Seither, Keokuk; J. F. Doty, West Liberty; L. Lindenberg, Dubuque; S. R. Miles, Mason City; G. C. Paulson, Newhall; Paul DeVol, Council Bluffs; C. S. Barger, Albia; L. H. Kurtz, Des Moines; C. R. Keating, Mt. Ayr; L. A. Gnam, Carroll; C. E. Haas, LeMars.

**Kansas Hardware Dealers' Assn.**
Pres., Oscar Roehr, Topeka.
V.-P., E. J. King, Logan.
Sec.-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kinlry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J. O'Neill, Osage City.

**Kentucky Retail Hardware and Stove Dealers' Association.**
Pres., W. T. Oldham, Mt. Sterling.
1st V.-P., W. S. Shackletts, Fulton.
2d V.-P., Jos. C. Kirchdorfer, Louisville.
Sec., Paul Wagner, Louisville.
Treas., Henry Heick, Louisville.

**Michigan Hardware Association.**
Pres. T. Frank Ireland, Belding.
V. Pres., John Popp, Saginaw.
Sec, A. J. Scott, Marine City.
Treas., H. C. Weber, Detroit.
Ex-Com., J. B. Sperry, Port Huron; F. A Turner, Caro; J. G. Patterson, Detroit; F. S. Carlton, Calumet; S. E. Hunt, Detroit; Samuel Winchester, Jackson; Fred S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray: A J. Scott Marine City.

**Minnesota Retail Hardware Assn**
Pres., W. H. Tomlinson, LeSueur
V.-P., H. S. Cleveland, Minneapolis.
Treas., W. E. Barto, Long Prairie.
Sec., M. S. Matthews, Mnpls.
Exec. Com., W. H. Tomlinson, Le Sueur; H. S Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; Benj. F. Kernkamp, St. Paul; C. H. Hornburg, New Ulm; J. Cowing, Alexandria; C. H. Casey, Jordon; C. F. Ladner, St. Cloud; J. Sehmidt, Wabasha; A. T. Stebbins, Rochester; J. McGuire, St. Paul.

**Missouri Retail Stove and Hardware Dealers' Association.**
Pres., Tayler Frier, Louisiana.
V.-P., E. L. Wachter, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., J. W. Poland, Carrollton; F. N. Kannsteiner, St. Louis; W. T. Shoop, Richmond.

**National Hardware Association.**
Pres., R. A. Kirk, St. Paul.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., John Freeman, Detroit; Samuel B. Bigelow, Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. W. Shapleigh, St. Louis.

**Nebraska Retail Hdw. Dealers' Asn.**
Pres. C. A. Peterson, Oakland.
1st V.-P. Nathan Roberts, Omaha.
d V.-P. Alex Meyer, Hastings.
3d V.-P. Frank Hecker, Friend.
Sec.-Treas., Harry Hall Lincoln.

**National Retail Hdw. Dealers' Asn.**
Pres., W. P. Bogardus, Mt. Vernon, O.
V.-P., C. H. Miller, Pennsylvania.
Sec., Treas, M. L. Corey, Argos, Ind.
Ex. Com., H. C. Cormick, Centralia, Ill.; Sharon E. Jones, Richmond, Ind.; T. F. Ireland, Belding. Mich.; L. Lindenberg, Dubuque, Iowa; A. T. Stebbins, Rochester, Minn.

**N. Dakota Retail Hdw. Dealers' Asn.**
Pres., H. N. Joy, Hamilton.
1st V.-P., H. F. Emery, Fargo.
2d V.-P., Frank Lish, Dickinson.
3d V.-P., H. B. Allen, Jamestown.
Sec., C. N. Barnes, Grand Forks.
Treas., W. H. Pinkerton, Lakota.
Ex. Com., E. E. Elliott, Sanborn; H. F. Strehlow, Casselton; Hurbert Harrington, Fargo.

**Ohio Hardware Association.**
Pres., W. P. Bogardus, Mt. Vernon.
V.-P. J. F. Baker, Dayton.
Cor. Sec., D. R. Burr, Piqua.
Fin. Sec., W. C. Jones, Columbus.
Treas., H. A. Waller, Ravena.
Ex. Com. F. A. Powers, Norwalk; Geo. Hartke, Cincinnati; E. Fisher, Wapakoneta; J. C. Snyder, Ironton; E. M. Potter, Cleveland.

**Pennsylvania Retail Hdw. Assn.**
Pres., Geo. L. Moore. Brownsville.
V.-P., Geo. J. Rudolph, Pittsburg.
Sec., J. E. Digby, McKees Rocks.
Treas., B. A. Maggine, Braddock.
Ex. Com., E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock; C. O. Shroyer, Dawson.

**St. Louis Stove Dealers' Assn.**
Pres., Wm. H. Hahn.
1st V.-P., G. A. Pauly.
2d V.-P., E. L. Wachter.
Sec., Louis Boehl.
Treas., E. Wertz.

**Southern Hardware Jobbers' Assn.**
Pres., F. A. Heitman, Houston.
1st V.-P., Col. B. F. Eshelman. New Orleans.
2d V.-P., John Donnan, Richmond, Va.
Sec., C. B. Carter, Knoxville.
Ex. Com., W. M. Crumley, Atlanta, Ga.; O. B. Barker, Lynchburg, Va.; Chas. H. Ireland, Greensboro, S. C.; C. S. Speer, Hot Springs Ark.

**Texas Hardware Jobbers' Assn.**
Pres., Jas. Moroney, Dallas.
1st V.-P., J. C. Bering, Houston.
2d V.-P.-J. Burnsides, Ft. Worth.
Sec.-Treas., R. Bell, Weatherford.
Ex. Com., G. A. Trumbell, Dallas; F. A. Heitman, Houston; E. S. Hughes, Abilene; J. J. Dickerson, Paris.

**Wisconsin Hdw. Dealers' Assn.**
Pres., L. Findiesen, Green Bay.
V.-P., H. L. McNamara, Janesville.
Sec.-Treas., C. A. Peck, Berlin.
Ex. Com., J. Kornelly, Milwaukee; E. H. Ramm, New London; H. S. Scofield, Sturgeon Bay; R. Murdoch, Beloit.

**THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 36 to 40 inclusive.**

T. A. Carrier, a Boscobel, Wis., hardware dealer, died of heart disease on May 4.

The hardware store of Fred Schietinger, Louisville, Ky., was destroyed by fire on April 30.

J. W. Hulen, a Centralia, Mich., hardware dealer, was a victim of a disastrous fire on April 28.

The Batavia Hardware Co., Batavia, Ill., have changed their name to the Kinne & Jeffrey Co.

Ketelsen & Degetau, Chihuahua, Mexico, hardware dealers, have just completed a handsome new building.

The Brown-Hurley Hardware Co., Des Moines, Ia., have increased their capital stock from $200,000 to $225,000.

The Michigan Wire Cloth Co., Detroit, Mich., have advanced their capital stock from $150,000 to $175,000.

Graff Bros., Fayette, Ia., hardware dealers, are victime of robbers, who stole $350 worth of goods on the night of April 29.

Hardware dealers in Oshkosh, Wis., have made a mutual agreement to raise the price of storing stoves from $3.00 to $3.50.

The stockholders of the Paxton Hdw. Mfg. Co., Paxton, Ill., held their annual meeting April 27 and re-elected all officers and directors.

G. H. Dietz, W. E. Jakway and E. P. Holmes are the incorporators of the G. H. Dietz Hardware Co., Cortland, Neb., capitalized at $10,000.

Henry H. Miller, Herman G. Miller and Lucie B. Miller are the incorporators of the Miller Hardware Co., Sheboygan, Wis., capitalized at $15,000.

The death is announced of Mrs. Cornelia E. Merritt, president of the David Maydole Hammer Co., Norwich, N. Y. Her death was caused by apoplexy.

Vittorio Ghiggeri, cutlery dealer located at 180 Prince street, New York city, has filed schedules in bankruptcy showing liabilities of $2,755 and no assets.

Wm. R. Flack, Elmer Gafford, Clara Orcutt and John W. Gafford are the incorporators of the Union Steam Cooker Co., Hart, Mich., capitalized at $5,000.

W. A. Reinecke, Heizer, Kan., sends us a little circular calling attention to his new automatic machine oiler, which uses oil pressure for the oiling of machinery.

Theo. Leas, Jas. J. Flynn, Aug. Reinnyhaus and Samuel W. Sparks are the incorporators of the Camden Gas Fixtures Co., Camden, N. J., capitalized at $20,000.

Fannie T. Sing, C. S. Stephenson and W. W. Glover are the incorporators of the Wm. B. Sing Co., Brooklyn, N. Y., hardware dealers, capitalized at $20,000.

The partnership heretofore existing between Chas. T. Fitts and Dana W. Fitts under the style of C. T. Fitts & Co., Sioux City, Ia., has been dissolved, and

their assets have been purchased and liabilities assumed by the Sioux Hardware & Heating Co. of that city.

The Thomas Devlin Mfg. Co., Philadelphia, manufacturers of a line of malleable fittings, radiators, etc., are erectin ga new factory at Burlington, N. J.

The Greensburg Hardware & Supply Co., Greensburg, Pa., have purchased the large three-story brick building which they have been occupying in that city.

The Tallmadge Hardware Co., Columbus, O., whose establishment was recently gutted by fire, have secured temporary quarters at 37 West Long street, that city.

James B. Richardson, Gardner W. Kimball and Gerald A. Griffin are the incorporators of the Standard Nut & Bolt Co., East Orange, N. J., capitalized at $5,000.

On May 2nd the hardware store of the C. E. Lewis Co., Emporia, Kans., was destroyed by fire, causing a loss of $30,000. The insurance on same amounted to $10,000.

W. F. Bakhaus, P. F. Hann, C. F. Griffith, H. K. Scott and F. E. James are the incorporators of the Dayton Gas Engine Co., Dayton, O., capitalized at $100,000.

G. A. Pickens, G. A. Diss and W. C. Smith are the incorporators of the Pickens, Diss & Smith Hardware Co., Maryville, Ala., incorporated with a capital stock of $10,000.

Sylvester Jones has sold his interest in the hardware firm of W. H. Jones & Co. to E. D. Spera of Cisco, Ill. The style of the firm name will be changed to Jones & Spera.

Ufa Housh has bought an interest in the Gutwald-Wallace Hardware Co., East St. Louis, Ill., and the style of the firm is changed to the Wallace-Housh Hardware Co.

Joseph W. Cleveland, Washington I. Ackerman and Leslie Van Wagoner are the incorporators of the J. W. Cleveland Hardware Co., Patterson, N. J., capitalized at $50,000.

Ora L. Miller, formerly of Arcola, Ill., has purchased the business of Robert R. Walden & Son, hardware dealers located at 1620 East Washington street, Indianapolis, Ind.

Daniel W. Scanlan, W. E. Cloyes and M. B. Miller are the incorporators of the National Lock Co., Chicago, capitalized at $5,000 for manufacturing locks, keys, furniture, hardware, etc.

J. M. Graham, John C. Bauer, W. K. Dupre, C. L. Storch, A. L. Dunit and B. W. Hopkins are the incorporators of the Hibbs Hardware Co., Portsmouth, O., capitalized at $50,000.

The Bindley Hardware Co., Pittsburg, Pa., have started the erection of a three-story warehouse at Amberson avenue and the Pennsylvania railroad, that city, which will cost $125,000.

Arthur R. Cruse is president, Frank Flavell is secretary and Aaron E. Kemper is treasurer of the Cruse-Kemper Co., Ambler, Pa., capitalized at $150,000, to succeed the Pettit Ornamental Iron & Fence Co.

At the two days' tournament at Attica, Ind., high average was made by C. B. Wiggins with an average of 95 per cent. He shot Peters' Ideal Shells loaded with Dupont powder. These shells are made by the Peters Cartridge Co., Cincinnati, O.

The Rotary Steam Cooker Co., Battle Creek, Mich., are offering to make the trade a special price on a sample order for their Rapid steam cooker. Their No. 2 copper boiler has aluminum shelves and anti-rust outer case. They also make a No. 0 cooker for small families, either all tin or with copper boiler.

On April 27 the floor of the Lowell-Meservey Hardware Co. at Colorado Springs, Colo., fell in owing to a pressure of 900 kegs of nails. The combined weight of the nails was probably in the vicinity of 90,000 pounds, and caused the timber in the floor to give way, which was followed by the caving in of the walls. The damage will amount to about $150.

The Andrews Wire & Iron Works, Rockford, Ill., send us their catalogue No. 24, showing their line of calf weaners, display goods, stationary goods, household wire goods, jardiniere stands, flower stands, toy furniture, railings and office fixtures, window guards, etc. Their "Sure Thing" weaners are strong basket weaners. Their magazine racks are neat and ornamental, consisting of four brass rods, 18 inches long, finished with fancy brass tips, joined by brass chains nine inches apart and finished in clear lacquer.

A "rasping" man made THE AMERICAN ARTISAN sanctum a visit the other day. Now this is a mean thing to say about Edmund D. Fisk, representative of the Nicholson File Co., Providence, R. I., but it is a fact that he has been giving jobbers from Pittsburg to Denver a very rasping line of conversation, which has resulted in his house filing many orders.

Mr. Fisk is an authority on files and rasps. He is also a most genial and courteous gentleman, whose kindly personality has made him a host of friends in the trade. This firm have a large number of orders on hand.

Iwan Bros., Streator, Ill., send us a little circular showing some of their hardware specialties, including Iwan's patent improved posthole and well auger, Iwan's Perfection posthole digger, Vaughan's pattern posthole auger, Iwan's split handle posthole auger, Iwan's sickle edge hay knife, and Iwan's volcano revolving and ventilating chimney top. In Iwan's Perfection posthole digger the shoulders extending from the upper part of the sockets are provided with mortises and tenons, which interlock, making a firm connection that absolutely prevents all side motion when in operation.

This digger is made of good material, well finished and is durable and substantial.

Although incorporated but a short time, the Southern Illinois Co-Operative Hardware Buying Association, of which O. B. Kurth, Centralia, is president; and H. G. Cormick, Centralia, is secretary and treasurer, and J. S. Bellamy & Co., Sandoval; Hinman & Mathews, Mount Vernon; Scheurer Bros., Nashville, and J. G. Vawter, Salem, are members, has proven remarkably successful, and its progress would indicate that there is a wide field for country dealers in dif-

ferent sections of the country to unite in small associations along the lines of this one. They are at present at work on a purchase of stove boards, coal hods and elbows, and there is but little question of this co-operative venture proving a successful one.

John S. Fray & Co., Bridgeport, Conn., send us their catalogue showing Fray's bit braces, breast and hand drills, hollow handle tool sets, etc. Their ratchet brace with breast drill attachment is furnished with two sets of forged steel jams equipped with patent springs. To aid in firmly holding the round shank drills a small sleeve wrench is furnished in which the socket is instantly locked by turning the ring, allowing both pawls to fall into the ratchet. Their hand drill No. 3 has malleable iron frame, spindle and pinion of steel, correctly cut gears, and three-jaw chucks, taking from 0 to 5-32, and cocobolo handles. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The 1903 Washer Co., Altoona, Pa., send us a circular describing their 1903 washer. This machine is built on correct principles; operates on ball bearings; has steel spindle and is provided with two oil-tempered coiled steel springs. The lid is hinged on the top of the tub and the rubber disc is drawn up to it and leans back on it, thus allowing all suds and drippings to run back into the tub. It is claimed with this machine lace curtains and the finest fabrics are washed without breaking a thread, while carpets and the dirtiest and heaviest garments are washed with ease and with the least possible wear on the garments. One of these circulars will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

Fred F. Bischoff & Co., Grand avenue and Robey street, Chicago, send us their No. A catalogue illustrating the Bischoff lawn fence. The wood piles used in this fence are made of the best selected Norman hardwood pine, size 4x4—2 feet long. They are driven into the ground with great force, which makes a very permanent foundation for the fence. The base of the fence is also made of Norman pine, size 2x5, which is to lay even with the ground, thus enabling the grass to be cut without injuring the lawn mower. All the wood construction is painted with creosote, which preserves the wood for years. The steel tubing are made of the best Bessemer steel, size 1 5-16 in. outside; all castings are made of malleable iron, which is unbreakable. The entire fence is enameled in black, finish in a high gloss. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

## FOR A SCORE OF YEARS.

Time has dealt so kindly with T. James Fernley, secretary of the National Hardware Association, and his wife that it will be a genuine surprise to many of their wide circle of friends to learn that their china wedding is near at hand. May 18, 1883, was *the* day in the home life of this couple, who will be at home on May 18 next from 8 p. m. to 10:30 p. m. at 1938 North Twelfth street, Philadelphia. We acknowledge an invitation to this event, and also to the christening of George Adamson Fernley, Josephine Fernley, Frances Sabena Fernley and Mary Elizabeth Fernley, which is scheduled for 9:30 p. m. on that date.

## BERGER'S NEW LANTERNS AND LAMPS.

The Berger Mfg. Co., Canton, O., send us a circular describing Berger's new lanterns and lamps and giving photographic reproductions of same. The goods shown in this catalogue include the No. 2 "Storm King" cold blast; No. O "Apex" standard tubular lantern; No. O "Reversible" side lift lantern; No. O "Rival" standard tubular lantern; No. O bail lift Standard tubular lantern; No. 2 "Apex" standard tubular lantern; No. 2 "Storm King" cold blast dashboard; No. O "Cemo" standard dashboard; No. O bail lift dashboard; No. O Quaker hood reflector, tubular globe street lamp, tubular globe hanging lamp, and No. 39 standard tin railroad lantern. One of these booklets will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

## LIGHTNING RODS.

Edw. A. Foy & Co., 640 Main street, Cincinnati, O., send us their catalogue No. 4 showing their line of lightning rods and ornamental weather vanes. Their patent galvanized steel star section lightning rod is constructed of a pure grade of steel made expressly for this purpose and is galvanized with the best German spelter to prevent rust. The couplings are extra large, made of copper and are strongly swedged down into the grooves of the rod, permitting the sections to be firmly held together without the least resistance to the current of electricity. The conductivity of this rod is the important feature offered by the great surface obtained in the four grooves or flanges. This rod is made in two sizes with patent couplings No. 3, ¾-inch, and No. 4, ⅞-inch.

In Phelps patent galvanized steel copper core cable, specially prepared steel wire is used for the outside strands, each of which is heavily galvanized. A core of five pure Lake Superior copper wires are ingeniously placed upon the inside adding to its conductivity.

This firm also make an artistic arrangement of ornaments as a finish for lightning rods. Their animal vanes are covered with pure gold leaf and are made to fit the star section rods as are also their scroll arrows.

As an ornament for a lightning conductor point elevation this firm offer silver, gold or blue glass balls. The coloring is on the inner surface of the glass and is inclosed so as to exclude the air and moisture, thus preventing them from discoloring. Their lightning rod points include bayonet, straight round, sprangle, shell and crown point. The point elevation is braced by their patent three-leg two holder galvanized steel standard bracer. Their end and T-connection bars are all made of copper and easily adjusted.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

# HANDLING GASOLENE

What is the best way for hardware dealers to handle gasolene? This question was asked us recently by the secretary of one of the state hardware associations, and we have secured the following interesting data on the subject from leading manufacturers, jobbers and retailers:

TANK SHOULD BE ON NORTH SIDE OF BUILDING.

George M. Clark & Company Division of the American Stove Co., Chicago, write:

"Gasolene should never be stored anywhere else than out of doors. We advise, too, the use of a proper tank made for storing gasolene This tank should be on the north side of the building if not under cover, and if under cover, it should be in a shed where there is a very free circulation of air. As is well known, the danger from gasolene when stored is accumlation of the heavy gas formed from evaporation. In a closed room, if an artificial light is brought in an immediate explosion is almost a necessary consequence."

INSURANCE COMPANIES RAISE RATES.

A. N. Shidler, South Bend, Ind., writes:

"As to the law, I am of the opinion that there is no law governing the sale of gasolene in Indiana.

"The rate of insurance is increased by The National Underwriters' Association where more than five gallons of gasolene is carried at one time."

KEEPS IT IN ARCHED AREA.

Fred Neudorff, St. Joseph, Mo., writes:

"There is such a loss of gasolene by evaporation and the gas is so volatile that it would take any exceedingly well-made apparatus to handle it properly.

"In our state we are restricted to having more than five gallons in the building, but having an arched areaway under sidewalk at our place of business, we can handle it in any desired quantity."

ADVISE EXTREME CAUTION.

Henry C. Weber & Co., Detroit, Mich., write:

"We use gasolene both for blacking as well as for demonstrating gasolene stoves and it would be well if one or two had the handling of the stoves. It is also well in selling gasolene stoves that a device be put on the valves so that the same cannot be turned, as it is seldom that customers, whether they are purchasing or simply in the store near the gasolene stoves, who will not, as you may call it, take interest enough to see if the valves will turn and probably forget to turn them off again, thereby causing a leakage and we hope, no further trouble.

"No doubt, various cities have their ordinances regarding handling gasolene as well as insurance companies their restrictions; and we believe it is best for each dealer to inform himself at home. Our advice would be 'extreme caution' to fill tanks only partly full, not over one-quarter full, and to keep five-gallon gasolene tank, when filled, outside of the building, or if in the hands of a careful and proper man, in a room where it will not be necessary to enter with a light."

WISCONSIN LAWS ON GASOLENE.

The Pritzlaff Hardware Co., Milwaukee, Wis., kindly send us this copy of the Wisconsin laws on the sale of gasolene:

"Sale of Gasolene. Section 9. Every person dealing at retail in gasolene in this state shall, after the first day of June, 1901, deliver the same to the purchaser only in barrels, casks, packages or cans painted vermilion red, and having the word, 'Gasolene' plainly stenciled thereon. No such dealer shall deliver kerosene in a barrel, cask, package or can painted or stenciled as above. Every person purchasing gasolene for use shall procure and keep the same only in barrels, casks, packages or cans painted and stenciled as above. No person keeping for use, or using, kerosene shall put or keep the same in any barrel, cask, package or can painted or stenciled as above. Any person violating any of the provisions of this section shall be punished by fine of not less than five, nor more than fifty dollars, or by imprisonment in the county jail, not to exceed three months or by both such fine and imprisonment.

"Conflicting Laws Repealed. Section 10. All acts or parts of acts in conflict with this act are hereby repealed.

"Section 11. This act shall take effect and be in force from and after the first day of June, 1901.

PERMIT OF MINNESOTA INSURANCE COMPANY.

M. S. Mathews, Minneapolis, Minn., writes:

"I inclose the permit in general use here. As a rule, the steel tanks are in common use here, hence the permit is made for that amount (barrel tanks)."

GASOLENE PERMIT.

"Permission is hereby granted for the keeping on premises for sale, not to exceed in the aggregate, 1 Bbl. Gasolene, the same to be kept in a close metallic can, free from leak—warranted by the assured that same shall be handled by daylight only—that no artificial light shall be permitted in room where same is stored.

"Attached to and forming part of Policy No.....of THE RETAIL HARDWARE DEALERS' MUTUAL FIRE INSURANCE Co., of Minnesota."

MICHIGAN LAWS ON GASOLENE.

T. Frank Ireland, Belding, Mich., writes:

"The insurance laws of the state of Michigan provide for the use of the following gasolene permit: 'Permission is hereby given for the use of gasolene or vapor stoves in the building described in this policy, but only under the following restrictions and conditions to be observed by the assured, viz.:

"'That at no time shall there be to exceed one gallon of gasolene (except that in the stove reservoir within said building or additions) and that kept in a tight and entirely close metal can, free from leak, and away from artificial light or heat. The stove reservoir to be filled and the gasolene handled by daylight only, and not in the same room, or rooms adjoining (having open communication) where or while any fire, blaze or artificial light or flame of any kind is burning.'

"We carry our gasolene in a tank outside the building, and know of no way by which outside storage tanks under ground could be used with pump except where the building is lighted by gasolene in which case an outside tank is used. We handle gasolene stoves and are prevented to fill them with gasolene in order to exhibit their workings."

CANNING FACTORY USED STORAGE TANK.

J. F. Maxey, Ozark, Ark., writes:

"I must say that I know but very little about the law in regard to the use of gasolene, and all the experience I have had with it is that I have used it for about 15 years in a tinner's soldering furnace. I saw it used in a canning factory some years ago and they used a storage tank sunk in the ground some distance from the building and had a pump in the house so it was not necessary to go out of the house to pump the gasolene in the building to the soldering furnaces."

KEEP FIVE-GALLON CAN IN STORE.

Chas. H. Williams, Streator, Ill., writes:

"I would say that we have tried various plans for handling gasolene and the best we have found is this: We made up a lot of five-gallon cans of No. 22 galvanized iron with a bale and screw top and a handle on the side and no spout. We take these cans to the Standard Oil Company station and fill them. We keep one five-gallon can at the store to retail from and keep the rest in an outside building. In this way

there is no danger of invalidating our insurance, and whenever we sell a five-gallon lot there is no waste."

TRIES A STEEL OUTSIDE TANK.

W. A. Barto, Long Prairie, Minn., writes:

"Our insurance regulations prohibit our carrying over five gallons of gasolene in the building. Personally, I simply use a steel tank outside of the building in a separate house, but I believe that the only right way to handle gasolene, if a person has any amount of trade, is in the tanks made by Bowser & Co., at Fort Wayne, Ind. These are provided with a self-measuring pump and come as nearly as anything which I have seen to eliminating waste."

A GREAT PROBLEM.

A. C. Vieth, Oakland, Iowa, writes:

"The handling of gasolene tanks, pumps, etc., has been a great problem in connection with our business, and I have often wondered why some one did not get up some kind of contrivance so it could be pumped out of a storage tank underground some little distance from building with pipe leading into building and pump attached to it so it would be convenient to draw the gasolene at any time with safety.

"We have to keep our gasolene stored in a building some distance from our store on account of insurance companies prohibiting our carrying any more than five gallons in the store building and I think this is proper and right. If it were allowed to be carried in the building, no doubt, many accidents would result from so doing, and as stated above, I think an underground tank away from building some distance, piped in building with shut-off or check valve that would be perfectly safe.

"I am well aware of the fact the way we have to keep it. It is a source of aggravation and takes up more time to look after this part of the business than the profit amounts to, and I believe that all hardware men realize this fact."

USE A TANK BRICKED AROUND.

The Detroit Vapor Stove Co., Detroit, Mich., write:

"Our experience in storing gasolene has been as follows: Dig a hole about two feet deep, and the size in diameter to suit the size tank you expect to use, build the hole out with a brick wall to the height of the tank you expect to use, and put a metal roof over it, which can be put on hinges so you can use it as a cover, which can be lifted up when the tank is refilled. We found it very successful."

BARRELS SHOULD STAND ON END.

The Dangler Stove & Mfg. Division of the American Stove Co., Cleveland, Ohio, writes:

"In storing gasolene, we would suggest that the barrels are always stood on end and kept in as damp a place as possible. When kept out of doors, always have it in a shady place and fill the chimes of the barrel either with water or moist sod."

STORES GASOLENE IN GALVANIZED IRON TANKS.

Frank Hacker, Friend, Neb., writes:

"I handle gasolene and store it in galvanized iron tanks in a storehouse especially built for it. The storehouse is about 18 feet from the store. I do not know of any state law regulating the storage or sale of gasolene. The insurance companies allow us to carry five gallons of gasolene in the store."

THEY USE A FIFTY-GALLON TANK.

The Kinsey Mfg. Co., Dayton, Ohio, write:

"What gasolene we have we use a fifty-gallon tank with a faucet placed near the bottom of it some two inches or more above the bottom. In all gasolene there is more or less water which settles to the bottom of the tank. By placing the faucet a little above the bottom, we draw off nothing but pure gasolene, then every once in a while we empty the tank, thus getting rid of the water. This tank is kept in a wooden closet and kept under lock and key, but so far as storing of gasolene for ordinary use is concerned, we can as above advised give you but little information."

SHOULD BE KEPT IN AN AIR-TIGHT TANK.

The Sun Stove Co., Detroit, Mich., write:

"We would suggest in storing gasolene that same be placed in an air-tight tank and sunk in the ground ir order to keep it cool."

FAVOR LARGE GALVANIZED IRON TANK.

The Ringen Stove Co. Division of the American Stove Co., St. Louis, write:

"We believe that you will find the best means of taking care of gasoline in an ordinary hardware store is, to have a large galvanized iron tank made to hold the gasoline in. This should be made large enough to accommodate from one to three or four barrels, according to the amount that is sold. By setting this on the outside of the store and building a shed over same sufficient to keep the heat off in the summer time, you will find that this is the simplest and easiest way to handle the gasoline for sale."

GASOLENE SHOULD NOT BE STORED IN CELLAR.

A leading firm of gasolene stove manufacturers write:

"Gasolene for private families should always be stored above ground and in an open room. A five or ten gallon can of gasolene, placed in a covered barrel, located out of doors or in an open shed, is the best possible storage. Where it is desired to store a larger quantity, a galvanized iron tank, with faucet placed above the ground, is the most economical manner of storage. Gasolene should never be stored in a cellar or basement. It should be remembered that gasolene gas is heavier than air, and when gasolene is stored in a room or vault, provision should be made for the free circulation of air."

## BUSINESS CHANGES.

NEW FIRMS.

Temple, Tex.—Brady & Black.
Racine, Wis.—James Murphy.
Onawa, Ia.—Howard Bros.
Great Bend, N. Dak.—H. Warner.
Butler, S. Dak.—Herman Bury.
Vinton, Ia.—George Gale.

BUSINESS CHANGES.

Cokato, Minn.—Peter Hannberg is succeeded by Titrud Bros.

Moorhead, Minn.—The Moorhead Hardware Co. succeed Hazen & Pabst.

Delavan, Minn.—E. J. Lien & Son have dissolved partnership; E. J. Lien retiring.

Pipestone, Minn.—W. F. Howard has purchased the interest of R. J. Olin in the firm of Clark & Olin.

Cumberland, Wis.—Cliff & Levinson succeed the Peterson Hardware Co.

Tomah, Wis.—J. S. Barrows is succeeded by Barrows & Son.

Deerfield, Wis.—Bolstad & Schults succeed L. O. Bolstad.

Truro, Ia.—G. A. Brooker succeeds M. L. Rothrock.

Madrid, Ia.—E. A. Stover succeeds Garwood & Stover.

Bode, Ia.—P. E. Ketman succeeds Schreiber Bros.

Merrill, Ia.—The Merrill Mercantile Co. succeed Schindel & Berner.

McKinney, N. Dak.—F. O. Johnson is succeeded by the Mouse River Hardware Co.

Butler, S. Dak.—Herman Burg succeeds F. Stressel.

Pierpont, S. Dak.—White & Ewald are succeeded by Ewald & Dunton.

Forsyth, Mont.—The Forsyth Hardware Co. succeed Bailey & Terrett.

Nacogdoches, Tex.—Patton & Burk succeed Lucas & Burk.

Charleston, S. C.—C. Roessler & Son have dissolved.

Louisa, Ky.—The Snyder Hardware Co. succeed Snyder Bros.

Vernon, Tex.—T. H. Shine succeeds George M. Dilley & Co.

Gorman, Tex.—Purdy & Riffe are succeeded by Purdy, Riffe & Rhodes.

MISCELLANEOUS.

Butte, Mont.—Davis & Weimscary burglarized.

Foxholm, N. Dak.—C. A. Peterson & Co. are about to open a branch office in this city.

# Heating and Ventilating

Byers & Reed are a new Mercer, Pa., heating firm.

The Neosho Heating, Plumbing & Cornice Co., are a new Neosho, Mo., concern.

It is said that a new radiator factory will shortly be established at Petaluma, Cal.

Bragg & Bokenkamp succeed Bragg Bros., in the heating business at Washington, Ia.

Richard Richardson of the New England Heating & Ventilating Co., Manton, R. I., is dead.

The Central Foundry Co., 116 Nassau street, New York, will manufacture radiators at their Gadsden (Ala.) plant.

C. A. Marston is president and J. W. Blunt is treasurer of the Tozico Valve Mfg. Co., Skowhegan, Me., capitalized at $10,000.

Walter C. Kerr, F. A. Plummer, E. N. Potter, Herbert N. Peck and B. R. Wales are the incorporators of the Central Heating Co., Detroit, Mich.

Lee Walters, Bessie Walters and M. Neuman are the incorporators of the Richmond Heating & Plumbing Co., Des Moines, Ia., capitalized at $10,000.

President Wooley of the American Radiator Co., Lake and Dearborn Sts., Chicago., is taking a two months' trip abroad in the interest of the company's affairs.

L. R. Boyce is president, Benj. Butler is vice-president and Harvey J. Bostwick is secretary and treasurer of the Jewel Furnace Co., Elkhart, Ind., capitalized at $10,000.

Philip Castline, Simon Reesma and Jacob Van Der Clock are the incorporators of the Passaic Plumbing & Heating Co., 107 Broadway, Paterson, N. J., capitalized at $2,500.

Edward Robinson, of the Robinson Furnace Co., the hard working furnace man at 107-109 Lake St., Chicago, is about to take a well earned vacation and will start on May 14th for a visit to the Pacific Coast, accompanied by his wife.

We acknowledge the receipt of a photograph, daintily mounted and bearing the genial and urbane features of J. P. Dugger, of the Kewanee Boiler Co., 167-169 Lake St., Chicago. This handsome piece of work is enhanced by bearing Mr. Dugger's autograph and the inscription "Good morning. Have you used a Kewanee Boiler?"

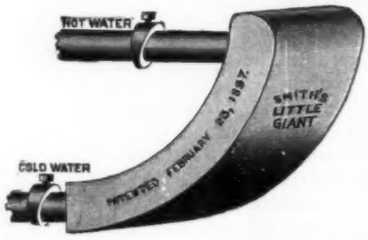
The Stowell Mfg. & Fdy. Co., So. Milwaukee, Wis., have extended an invitation to their employers to attend a concert to be given by the well known Lyric Glee Club, of Milwaukee, 40 voices; Daniel Protheroe, conductor, to be given in the new addition to the machine shop on Fifth avenue, on Wednesday evening, May 13, 1903, at 8 o'clock.

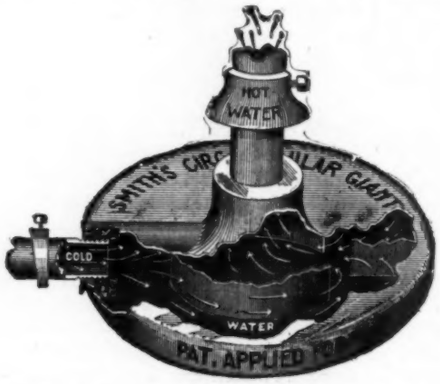
### TRIUMPH FURNACES IN THE WEST.

Zenas A. Craig, the well-known Dayton, O., furnace man and president of the Craig-Reynolds Foundry Co. of that city, has been in Chicago recently and has made arrangements with John Kontny, 153-159 Jefferson street, Chicago, to handle the Triumph furnaces and heaters. These famous heaters are well known to the western trade and they are up-to-date constructions. Complete stocks will be carried for prompt shipment, both at Dayton, O., and Chicago.

### SMITH'S LITTLE GIANT AND CIRCULAR GIANT.

The accompanying cuts show Smith's Little Giant and Circular Giant water heaters, manufactured by the Chas. Smith Co., 122 Lake st., Chicago. The Little Giant water heater is made in four sizes and can be placed in any furnace. It may be used to heat from one to four rooms, or to heat tanks. Smith's Circular Giant water heater is made in six sizes from 14 to 24 inches. It can be placed in any furnace, but




is especially adapted to one with a large drum or dome, in which it acts as a deflector, throwing heat to the side of the furnace and making a very material increase in the capacity thereof. It will heat from one to eight rooms with hot water and is also effective in heating large tanks.

### STEAM AND HOT WATER HEATERS.

The Boynton Furnace Co., 147-149 Lake street, Chicago, and 207-209 Water street, New York, send us their 1903 catalogue of steam and hot water heaters, a feature of which is Boynton's shaking grate with double action eccentric motion—i. e., having alternate sections working in opposite directions at the same time. The heat contact is not disturbed, but is improved as soon as the ashes are removed and draughts of air admitted. The fingers bearing up the coal interlock with each other and move in opposite directions. The ashes can be removed with a gentle shake and the clinkers and cinders with a heavy one.

Boynton's "Patriot" steam boiler for hard coal only has a solid cast-iron jacket with direct and indirect draft. There is also a positive circulation within the boiler and a steady water line is maintained.

The Admiral steam boiler for hard or soft coal or natural gas is fitted with triangular revolving grates, and the ash pit is so constructed that the grate complete can be withdrawn on a sliding track. The con-

nections are made by means of cast-iron mesh nipples and the boiler can be set up in a very short time. A circulating connection is provided between the steam dome and water leg of the boiler, which prevents priming and maintains a steady water line. The self-contained driving flue is a factor. The water has a rapid and even circulation over all the heating surfaces and thus permits the quick generation of steam.

Boynton's "Patriot" water heater with cast-iron jacket for hard coal only has a water section cast in one solid piece. It has revolving triangular grates, large ash pit and direct and indirect draft dampers. One of these catalogues will be furnished the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

## JUST LIKE A SNOWBALL.

A comparison of the growth of the business of a furnace and steam and hot water heating firm to a snowball rolling down hill is, we frankly admit, infelicitous from an aesthetic standpoint, but it expresses the condition of affairs at 191 Reed street, Milwaukee, Wis., where the L. J. Mueller Furnace Co. are located.

About a year ago they erected a new two-story warehouse, of solid brick, 50x150 feet in dimensions, but the great increase in their furnace and boiler business compelled them to erect another building of the same material and of same dimensions, which has just been completed. This makes a total of four warehouses which they now occupy, and shrewd Milwaukee building contractors would do well to visit this concern about the 1st of October next, as by that time they will be probably looking for bids for the construction of warehouse No. 5.

## MONCRIEF FURNACES.

The Henry & Scheible Co., 6-10 Long street, Cleveland, O., send us a circular describing their Moncreif all cast furnaces, in which the fire pot is of heavy weight and nearly straight. As the lower part of the pot is more or less filled with ashes and the upper part with live fuel, the upper part expands to a greater extent than the lower one, and by making the pot in two sections, with the cup joint in the center, the effect of the unequal expansion and contraction on a solid pot, which is to crack it, is overcome.

The feed section rests upon the upper section of the fire-pot. The feed door opening is larger, sufficiently so for the free admission of a large scoop shovel. The feed section and top radiator are so carefully modeled that the air to be warmed circulates easily and naturally over every part—a large part of the air passing almost directly over the center of the fire pot, the hottest portion of the furnace—where it is surrounded by heated surfaces, the remainder passing between the casing and the outer surface of the return flue. The form of the castings is such that the air while becoming warmed is given such an impetus that it is forced through the conductor pipes to the rooms to be warmed —even under adverse circumstances. The radiator is crowned with an all cast top return flue which compells the product of combustion to travel around both sides of the top before entering the smoke exit. The casings are double, with ¾-inch space between the two, allowing for a circulation of air between the inner and outer sections and reducing the radiation of heat into the basement to the minimum.

## TRIUMPH WARM AIR FURNACE.

The Craig Reynolds Foundry Co., Dayton, O., for whom John Kontny, 153-159 So. Jefferson St., Chicago, is western agent, send us a catalogue describing their Triumph furnaces. A typical furnace of their's is the Triumph King, in which the top radiator is cast in one piece, is exceptionally durable, with immense corrugated radiating surface, and is absolutely gas-tight and self-cleaning.

The combustion chamber, resting on the firepot, is a heavy, durable body, so constructed that soot or ashes cannot accumulate. The radiating surface is large and effective, heating three times as much air as those of inferior construction.

The sectional firepot, which is subject to severe tests, is constructed so as to obtain the best possible results from combustion and durability, and is superior in all respects to other makes. The construction is in two heavy, solid pieces of cast iron, with the division or cup joint exactly in the center, making an almost indestructible firepot, and entirely obviating the liability of the pot to break or crack by expansion and contraction in the process of heating and cooling. The advantages of the pointed or porcupine firepot are evident. The pot is straight, preventing the accumulation of ashes. If desired, firepot cast in one piece, solid, with or without porcupines is furnished.

The Triangular revolving grate, or the Triumph Improved Anti-Clinker grate is furnished. Either style of grate is interchangeable with any furnace.

An arrangement admitting of the entire withdrawal of either of these grates from the ashpit is a valuable and distinctive feature.

The air dampers or registers for the firepot, admit of a flow of fresh air and prevent the pot from being overheated, and the feed, clinker doors and check dampers, are efficient and conveniently arranged.

The water pan is of ample size. The shakers and dust-damper rods are made of best malleable iron, and throughout the construction is of the best possible character.

This firm's line of furnaces include The Triumph and Triumph Special, Triumph King, Triumph Steel, Triumph Air Blast and Triumph Combination heater.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

## IN THE REALM OF THE SPANKER GAFF.

The stove fraternity have a treat in store on Tuesday, May 12th, 11 p. m., as they will be the guests of the Gobeille Pattern Co., Cleveland, O., at a buffet luncheon and smoke talk at the Cleveland Yacht Club. Coxswain Gobeille will discourse learnedly on bowsprits, boomkins and binnacles, while Able Seaman Perdue will teach stove makers how to tell a mizzen top gallant backstay from a jib guy and a crossjack brace from a main sheet.

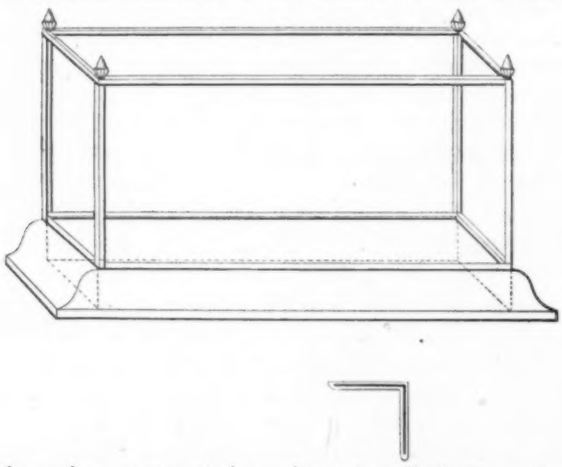
# Tinshop.

## HOW TO MAKE AN AQUARIUM.

To The American Artisan.

I send you my method of making an aquarium. Prepare galvanized iron angle, say from 24 gauge iron, with equal sides, 5/8 in. or 3/4 in. and cover with zinc as shown in the sketch. This will make a light and strong bar. The top and bottom frames are to be equal in all respects. In putting the frame together make flush joints for the glass to lie close to the bards all around. When fitted together and well soldered, it will be strong and appear in the illustration as shown. The corners can be made stronger, if required, by pieces bent to shape and soldered on, or ornamental bosses may be used to suit the fancy of the maker. When the bottom, which should be of zinc, is soldered to the bottom frame put in the glass sides, which should fit nicely and be well bedded in suitable cement. The end glasses being placed and fitted closely to the sides will keep the sides in place, and by soldering a stop on top of frame at each end, the end glasses will be kept securely in place. The next requisite is a slate bottom to fit inside over the metal bottom and against the glass, and should be well cemented on all sides. A half inch hole should be drilled in the center of the slate, through which to draw off the water when desired. The pipe may be stopped by a cork or may have a faucet attached.

The aquarium may be made simply a plain rectangular box, or may have a base as shown in the cut, with or without ornaments at the corners. It will be seen



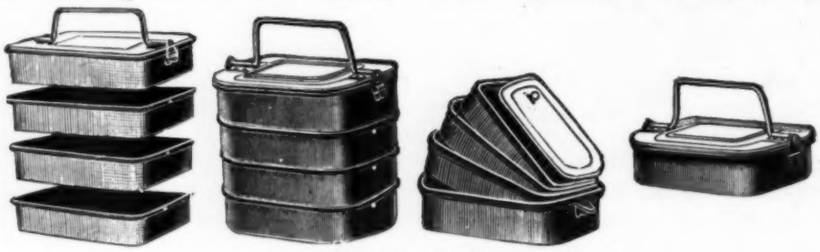
that when constructed as above described, the water comes in contact with glass and slate only and cannot be contaminated by metallic poison. Never use red or white lead in an aquarium.

Weyalusing, Wis., May 4, 1903. "R. J."

## A DINNER SET.

It is said that dyspepsia is more prevalent in this country than abroad and is principally due to the almost universal habit of our business, commercial and working men in eating quick lunches. The custom of bolting down a sandwich and piece of pie and gulping down hot coffee all in ten minutes is "race suicide." The railroad switch claims its thousands of victims, but the railroad doughnut claims its tens of thousands.

Of late there has been a general awakening on the part of manufacturers and intelligent mechanics to the fact that interests of employers and employes are best served by adequate and leisurely eaten noonday meals. Such a meal cannot be carried in a newspaper or a cheap pail, but it can in one of Ehle's nestable dinner pails, which separates liquid foods from solids, moist from dry, strong flavored from mild, etc. Each section can be folded or left off at will.



Ehle's Food Carrier.

These dinner sets enable an artisan to enjoy a healthy meal and they are coming into marked favor wherever introduced. The hardware trade are finding them good sellers. One hardware dealer in a factory town who followed the plan of making the foremen of the different departments of the different mills presents of these pails on condition that they hand out descriptive circulars to the men in their departments made a larger gross profit on these pails than he did on stoves during November and December, 1902, although those were good stove months. The F. G. O. Ehle Co., Buffalo, N. Y., are manufacturers of these pails.

## TINPLATE WORKERS MEET.

The fifth annual convention of the Tinplate Workers' International Protective Association opened at 10 o'clock, April 29, at Anderson, Ind. The delegates assembled at Decker Hall and were greeted on behalf of the city by Mayor John L. Forkner. The mayor assured the visitors of a welcome, and he did it so cleverly that the convention was moved to vigorous applause. President Powell and other officials responded, testifying their appreciation of the hospitality extended. The president named the following committees:

On President's Address—Charles Lennins of McKeesport, Pa.; Jacob Eiffler of Wheeling, W. Va., and John Hartley of Elwood.

Good of the Order—Grant Jacobs of Elwood; W. H. Petersimes of Anderson; George Knost of Elwood; Benjamin Butler of Newcastle, Pa., and John Lynn of Pittsburgh.

Grievances and Appeals—H. E. Barrett of McKeesport, Pa.; John Horner of Martins Ferry, O.; H. J.

Murnan of Elwood; John Moran of Wheeling, W. Va., and William Hutchison of Avonmore, Pa.

Ways and Means—Bent L. Bartlett of Newcastle, Pa.; W. S. O'Brien of Pittsburgh; John Allen of Elwood; William Edwards of Chester, W. Va., and D. B. Forest of Washington, Pa.

Secret Work—George Seigfried of Sharon, Pa.; Charles Alvey of Newcastle, Pa., and Ben Williams, Canton, O.

Rules—W. W. Jones of Niles, O.; L. G. Hicks of New Kensington, Pa., and C. W. Senseny, Gas City.

Appropriations and Claims—Fred Miller of Newcastle, Pa.; Charles Johnson of Steubenville, O.; O. H. Borland of New Kensington, Pa.; C. A. Riggs of Newcastle, Pa., and J. A. Hazlett, Steubenville, O.

Auditing—J. E. Elder of Newcastle, Pa.; E. E. Katterhenry of Elwood, and W. J. Madine, Pittsburgh.

The convention remained in session for ten days.

The merger of the Amalgamated and the American Alliance of Sheet Metal Workers was accomplished at Milwaukee on May 8th by committees named for that purpose, after an all-day session, thereby uniting 12,000 and 3,000 men respectively. All the principal points of difference which it was feared would prevent union were amicably adjusted.

After the constitution is adopted the members of the alliance will take part in the election of officers and the selection of the next convention city.

## NOTES AND QUERIES.

### Signs and Letters for Cornice Work.

From James Reifsnyder, Reading, Pa.

Where can I learn how to make numbers and letters for cornice work?

(Can any of our readers give the desired information.)

### GASOLENE LAMPS.

From L. A. Fish & Co., Cloquet, Minn.

Can you tell me names of makers of gasolene lamps supplied from a central tank?

Ans.—American Lighting Co., Chicago, Ill.; Chicago Solar Light Co., Chicago, Ill.; Climax Vapor Lamp Co., Canton, O; Colonel Gas Burner Co., Columbus, O.; Imperial Gas Lamp Co., Chicago, Ill.; Michigan Snell Vapor Lamp Co., Detroit, Mich.; H. Merkel, 512 Elm street, St. Louis, Mo.; Phelps Co., Detroit, Mich.; Ringen Stove Co., St. Louis, Mo.; Superior Mfg. Co., Ann Arbor, Mich.

### POULTRY TROUGHS.

From A. E. Glick, Annapolis, Ill.

Where can I buy poultry troughs?

Ans.—D. H. Bausman, Bausman, Pa.; A. Buch's Sons, Elizabethtown, Pa.; C. W. Costello, Waterborough, Me.; V. Wetherill, Doylestown, Pa.

### GALVANIZED STEEL WASH TUBS.

From "Reader," Peoria, Ill.

In response to query of Conrad May, Dyersvile, Ia., would state that the Eureka Co., Rock Falls, Ill.; U. S. Washing Machine Co., Chicago., and L. Cline Mfg. Co., 1239 Wabash Av., make galvanized steel wash tubs.

The Decatur Cornice & Roofing Co., Decatur, Ala., will shortly make important additions to their plant.

## ITEMS.

The Michigan Tin Can Co. are a new Detroit, Mich., concern capitalized at $100,000.

The Globe Iron Roofing & Corrugating Co., Newport, Ky., are erecting a new brick warehouse 100x150 feet in dimensions.

Hugh D. Walker, James A. Straith and Oscar E. Fleming are the incorporators of the Sheet Steel Stamping Co., Detroit, Mich., capitalized at $30,000.

James B. Richards, Gerald A. Griffin and Walter H. Bond are the incorporators of the Vermont Unfading Green Slate Co., East Orange, N. J., capitalized at $150,000.

Al Bourlier, Harry Murry, Emilie B. Bourlier and W. J. Hogan are the incorporators of the Louisville Cornice, Roofing & Heating Co., Louisville, Ky., capitalized at $10,000.

It is said that a patent catching machine, which will displace the tin catchers in the mills of the United States Steel Corporation at Sharon, Pa., has been in successful operation for the past five weeks.

Hugh C. Lendrin, Chas. Lewis and William F. Bremen are the incorporators of the Hugh C. Lendrin Co., Patterson, N. J., capitalized at $125,000, for the manufacture of sheet metal goods.

Wm. C. Sharp, Thos. Shaw, Edward S. Moore, Thomas R. Cowell and John F. Dowd are the incorporators of the United States Roofing Tile Co., Parkersburg, W. Va., incorporated with a capital stock of $100,000 for the manufacture and sale of roofing tile.

Powers Bros., Streator, Ill., send us a postal circular in which they state that they are the sole manufacturers and patentees of the Powers automatic chimney top, and suggest that the trade should place their orders now for early shipment in order to secure prompt delivery.

Merchant & Co., Inc., manufacturers of tin and terne plates, sheet iron, metals, etc., have removed their Chicago office to 14—28 Michigan St., where their large gain in floor space will permit an immediate increase in their stock in all lines. Three large loading exits assure prompt service to teams, and a switch track to the door affords ready handling of carloads.

The National Association of Master Composition Roofers of the United States will hold their twelfth annual convention in Louisville on June 17 and 18, and will make their headquarters at the Louisville Hotel in that city. As recreation from their convention labors, they will take a trip to the Mammoth Cave, where they will view roofs of striking stalactites, gleaming gypsum and smoothest limestone.

## A CAPITAL REFERENCE BOOK.

J. L. Skuttle, Lake Mills, Ia., writes: "I received your Manual of Business and will say it is a capital reference book which every business man should have in his store. The American Artisan alone is worth the price of the subscription asked. It is a paper which every tinner in the country should have."

## ADVERTISERS' INDEX.

### ALPHABETICAL LIST.


Aitchison, The Robert Perf'd Metal Co. .... 45
American Cutlery Co. .... 54
American Radiator Co. .... 2
American Steel Roofing Co. .... 46
American Tinplate Co. .... 45
American Wooden-Ware Mfg. Co 50
Atkins, E. C. & Co., The. .... 60
Atlas Bolt & Screw Co .... 1
Atlas Mfg. Co. .... 60
Auer Register Co. .... 12
Auld & Conger Co., The .... 44
Avery Stamping Co., The .... 54
Barnett, G. & H. Co. .... 1
Beckwith, Estate of P. D. .... 16
Berger Bros. Co .... 49
Berger Mfg. Co .... 47
Bergstrom Bros. & Co. .... 11
Bigelow, J. E .... 42
Blacklock Foundry Co .... 55
Black Silk Stove Polish Works .... 45
Bluffton Cream Separator Co. .... 50
Boynton Furnace Co. .... 8
Brammer, H. F. Mfg. Co. .... 54
Brand Stove Co .... 8
Brauer, A. G. .... 43
Bridgeport Crucible Co .... 43
Bridgeport Gun & Implement Co. 2
Briscoe Mfg. Co .... 50
Buckeye Paint & Varnish Co. .... 48
Burton, The W. J. Co .... 1
Canton Steel Roofing Co. .... 43
Central Mfg. Co. .... 51
Champion Steel Range Co. .... 6
Chappell Fur. Co., The .... 11
Clark Novelty Co .... 50
Clark, Quien & Morse .... 43
Clayton & Lambert Mfg. Co. .... 49
Clear, Chas. .... 12
Columbus Bolt Works .... 1
Columbus Stove Co .... 7
Connors, Wm. Paint Mfg. Co. .... 1
Cooney & Geiger .... 60
Cope, Geo. W. Pattern Works .... 43
Cortright Metal Roofing Co. .... 44
Craig-Reynolds Fdy. Co., The .... 3
Cutler Hardware Co .... 56
Denning Fence Works .... 42
Disston, Henry & Sons .... 51
Dixon, Jos. Crucible Co. .... 42
Detroit Heating & Lighting Co. .... 13
Duplex Latch Co .... 55
Dust, Wm. T. Co. .... 43
Dwight Slate Machine Co. .... 48
Eller, J. H. & Co. .... 45
Eclipse Stove Co. .... 4
Enterprise Mfg. Co. of Pa .... 59
Evans Stamping & Plating Co. .... 44
Farwell, Ozmun, Kirk & Co. .... 57
Faultless Mfg. Co. .... 6
Ferrosteel Co .... 13
Forest City Foundry & Mfg. Co. .... 10
Forest City Paint & Varnish Co. .... 56
Fox Typewriter Co .... 54
Foy, The E. A. Co. .... 56
Friedley & Voshardt .... 47
Front Rank Steel Fur. Co .... 10
Fulper Pottery Co .... 57
Garry Iron & Steel Roofing Co. .... 49
Galesburg Cornice Works .... 50
Geneva Tool Co. .... 1
Globe Ventilator Co. .... 60
Gobeille Pattern Works .... 43
Hart & Crouse Co. .... 8
Helios-Upton Co. .... 44
Henry & Scheible Co. .... 12
Herrick, F. A. & Co. .... 55
Hoffman, Geo. W. .... 42
Home Pride Range Co. .... 58
Horigan Supply Co. .... 54
Howes, S. M. Co., The .... 43
Huffman, Theo. P. & Co. .... 60
Hurwood Mfg. Co. .... 51
Illinois Roofing & Supply Co. .... 45
Iwan Bros .... 57
Joliet Stove Works .... 4
Jones, J. H. .... 44
Kewanee Boiler Co. .... 2
Kimball Bros. Co. .... 43
King Drill Mfg. Co. .... 50
Klauer Mfg. Co. .... 46
La Crosse Steel Roofing & Corrugating Co .... 47
Lalance & Grosjean Mfg. Co. .... 49
Lawrence Mfg. Co. .... 50
Lee-Glass-Andreesen Hdw. Co. .... 59
Lennox Mfg. Co. .... 8
Leonard Mfg. Co. .... 55
Lufkin Rule Co. .... 51
March-Brownback Stove Co. .... 9
Mayer & Co .... 2
McClure & Co .... 60
McVoy, John & Co. .... 47
Meyers, The Fred J. Mfg. Co .... 42
Meyer Furnace Co. .... 11
Milwaukee Corrugating Co. .... 46
Milwaukee Pattern Works .... 43
Monroe Foundry & Furnace Co. .... 8
Mueller, L. J. Furnace Co. .... 9-10
Nat. Enameling & Stamping Co. .... 48
Nicholson File Co. .... 1
Nickel Plate Stove Polish Co. .... 7
Nineteen Hundred Washer Co. .... 53
Norris & Loring Hdw. Co. .... 42
North Bros. Mfg. Co. .... 51
Obermayer, S. & Co. .... 15
Osborn, The J. M. & L. A. Co. .... 60
Osgood Scale Co. .... 1
Peck, C. A .... 54
Pelouze Scale Co. .... 53
Perkins, J. L. & Co. .... 1
Peters Cartridge Co. .... 2
Philadelphia Lawn Mower Co. The 56
Pittsburgh Stove & Range .... 5
Plume & Atwood Mfg. Co. .... 43
Powers Bros .... 1
Pullman Mfg. Co .... 60
Robinson Fur. Co. .... 14
Roney Returner Co. .... 49
Rotary Steam Cooker Co .... 55
Sayre Stamping Co. .... 43
Schwab, R. J., & Sons Co. .... 13
Seither & Cherry Co .... 50
Shipman, Bradt & Co. .... 57
Simpson Stove & Mfg. Co. .... 7
Smith, Chas. Co. .... 6
Smith & Hemenway Co. .... 54
Sperry, D. R. & Co. .... 55
Stanley Rule & Level Co. .... 54
Stevens Arms & Tool Co. .... 60
Stevens, F. B. .... 43
Steward, D. M., Mfg. Co. .... 45
Stimpson, Edwin B. & Son .... 45
St. Louis Electrotyping & Foundry Co .... 45
Stokes, W. A. & Co. .... 56
Stowell Mfg. & Fdy. Co. .... 13
Stuber & Kuck .... 53
Sunlight Lava Mfg. Co. .... 42
Sun Stove Co. .... 5
Superior Mfg. Co .... 50
Swaine, Fred J. & Co. .... 48
Symonds Mfg. Co. .... 12
Taylor & Boggis Fdy. Co. .... 46
Tower Mfg. Co. .... 55
Travilla, M. .... 1
Turner Brass Works .... 49
Vance Boiler Co. .... 2
Voss Bros. Mfg. Co. .... 52
Weber Gas and Gasoline Engine Co .... 56
Weiss, H. & Co. .... 48
Weller Pattern Co. .... 43
Welling-Bowers Mfg. Co. .... 50
Western Furnace & Foundry Co. .. 11
White Lily Washer Co. .... 52
Willard, Wm. G. .... 6
Young Mfg. Co., The .... 48


### CLASSIFIED LIST.


**Acetylene Burners.**
Sunlight Lava Mfg. Co. .... 42

**Agricultural Tools.**
Geneva Tool Co. .... 1

**Architectural Sheet Metal Work.**
Berger Mfg. Co. .... 47
Canton Steel Roofing Co. .... 43
Friedley & Voshardt .... 47

**Asphalt Roofing.**
Perkins, J. L. & Co. .... 1

**Caldrons.**
Sperry, R. D. & Co. .... 55

**Carpenters' Tools.**
Hurwood Mfg. Co. .... 51
Smith & Hemenway .... 54
Stanley Rule & Level Co. .... 54

**Ceilings—Steel.**
Berger Mfg. Co. .... 47
Canton Steel Roofing Co .... 43
Eller, J. H. & Co. .... 43
Friedley & Voshardt .... 47
Garry Iron & Steel Roofing Co. .... 49
Illinois Roofing & Supply Co. .... 43
La Crosse Steel Roofing & Corrugating Co. .... 47
Milwaukee Corrugating Co. .... 47

**Churns.**
American Wooden-Ware Mfg. Co. .. 50

**Conductor Pipe.**
Clark, Quien & Morse .... 43
Illinois Roofing & Supply Co. .... 43
Klauer Mfg. Co. .... 46

**Cornice Ornaments and Statuary.**
Friedley & Voshardt .... 47

**Corrugated Iron.**
Garry Iron & Steel Roofing Co. .... 49
McVoy, John & Co. .... 47

**Cream Separators.**
Bluffton Cream Separator Co. .... 50
Galesburg Cornice Works .... 50
King Drill Mfg. Co. .... 50
Lawrence Mfg. Co. .... 50
Seither & Cherry Co .... 50
Superior Mfg. Co. .... 50

**Cutlery.**
American Cutlery Co. .... 54
Cutler Hardware Co .... 56
Farwell, Ozmun, Kirk & Co. .... 57
Smith & Hemenway Co. .... 54

**Cut Offs.**
Cooney & Geiger .... 60
Klauer Mfg. Co. .... 46
Young Mfg. Co. .... 48

**Drills.**
North Bros. Mfg. Co. .... 51

**Elevators.**
Kimball Bros. .... 43

**Excelsior.**
Huffman, Theo. P. & Co. .... 60

**Enamel Ware.**
Nat'l Enameling & Stamping Co. .. 48

**Faucets.**
Clark Novelty Co. .... 50

**Fencing**
Denning Fence Works .... 42

**Files.**
Barnett, G. & H. Co. .... 1
Disston, Henry & Sons .... 51
Mayer & Co .... 2
Nicholson File Co. .... 1

**Filters.**
Fulper Pottery Co. .... 57

**Fire Arms.**
Bridgeport Gun & Implement Co. 2
Peters Cartridge Co. .... 2
Stevens, J. Arms & Tool Co. .... 60

**Fire Pots.**
Clayton & Lambert Mfg. Co. .... 49

**Fixtures—Office.**
Leonard Mfg. Co. .... 55

**Flour Sifters.**
Meyers, The Fred J., Mfg. Co. .... 42

**Flue Stoppers.**
Welling-Bowers Mfg. Co. .... 50

**Foundry Supplies.**
Obermayer, S. & Co. .... 15

**Fruit Press.**
Enterprise Mfg. Co. of Pa. .... 59

**Furnace Cement.**
Connors, Wm. Paint Mfg. Co. .... 1

**Furnaces—Tinners.**
Clayton & Lambert Mfg. Co. .... 49

**Furnaces—Warm Air.**
Bergstrom Bros. & Co. .... 10
Boynton Furnace Co. .... 5
Brand Stove Co. .... 6
Chappell Fur. Co., The .... 10
Craig-Reynolds Fdy. Co., The .... 3
Forest City Foundry & Mfg. Co. .. 8
Front Rank Steel Fur. Co .... 9
Henry & Scheible Co. .... 12
Lennox Mfg. Co. .... 9
March-Brownback Stove Co. .... 8
Meyer Furnace Co. .... 10
Monroe Foundry & Furnace Co. .... 8
Mueller, L. J. Furnace Co. .... 9-12
Robinson Fur. Co. .... 14
Schwab, R. J. & Sons .... 13
Smith, Chas. Co. .... 7
Western Furnace & Foundry Co. .. 10

**Galvanized Ware.**
Briscoe Mfg. Co. .... 50

**Gas and Gasoline Engines.**
Weber Gas and Gasoline Engine Co. .... 56

**Gun Cleaners.**
Bridgeport Gun & Implement Co. 2

**Hardware Specialties.**
Atkins, E. C. & Co. .... 60
Atlas Mfg. Co .... 60
Atlas Bolt & Screw Co. .... 1
Avery Stamping Co., The .... 54
Berger Bros. Co .... 49
Bigelow, J. E. .... 42
Blacklock Foundry Co. .... 55
Briscoe Mfg. Co. .... 50
Central Mfg. Co. .... 51
Cutler Hardware Co. .... 56
Disston, Henry & Son .... 51
Duplex Latch Co .... 55
Enterprise Mfg. Co. of Pa. .... 59
Herrick, F. A. & Co. .... 55
Hurwood Mfg. Co. .... 51
Iwan Bros .... 57
Lalance & Grosjean Mfg. Co. .... 49
Lawrence Mfg. Co. .... 50
Lee-Glass-Andreesen Hdw. Co. .... 59
Lufkin Rule Co. .... 51
Mayer & Co .... 2
Meyers, The Fred J., Mfg. Co. .... 42
Nat. Enameling & Stamping Co. .. 48
Norris & Loring Hdw. Co. .... 42
North Bros. Mfg. Co. .... 51
Peck Hardware Co., C. A. .... 54
Plume & Atwood Mfg. Co. .... 44
Roney Returner Co. .... 49
Rotary Steam Cooker Co. .... 55
Smith & Hemenway Co .... 54
Sperry, D. R. Co. .... 55
Stanley Rule & Level Co. .... 54
Stuber & Kuck .... 53
Tower Mfg. Co. .... 55

**Hay Carriers.**
Roney Returner Co. .... 49

**Heaters—Hot Water and Steam.**
American Radiator Co. .... 2
Boynton Furnace Co .... 8
Craig-Reynolds Fdy. Co., The .... 3
Hart & Crouse Co. .... 8
Kewanee Boiler Co. .... 2
Smith, Chas. Co. .... 6
Vance Boiler Co. .... 2

**Heating Devices.**
Burton, The W. J. Co .... 1
Detroit Heating and Lighting Co. .. 13

**House Furnishing Goods**
Briscoe Mfg. Co. .... 50
Enterprise Mfg. Co. of Pa. .... 59
Lalance & Grosjean Mfg. Co .... 49
Meyers, The Fred J., Mfg. Co. .... 42
Nat. Enameling & Stamping Co. .. 48
Sperry, D. R. & Co. .... 55
Stuber & Kuck .... 53

**Knives.**
Smith & Hemenway Co. .... 54

**Ladders.**
Stokes, W. A. & Co. .... 56

**Lawn Mowers.**
Philadelphia Lawn Mower Co. The 56

**Lawn Sprinklers.**
Smith & Hemenway Co..... 54

**Lightning Rods.**
Foy, The E. A. Co..... 56

**Mail Boxes.**
Canton Steel Roofing Co ..... 43
Peck, C. A ..... 54

**Metals—Perforated.**
Aitchison, The Robert Perf'd Metal Co..... 42
Stimpson, Edwin B. & Son. .... . 42

**Metal Workers Crayons.**
Steward, D M., Mfg. Co..... 43

**Oven Thermometers.**
Evans Stamping & Plating Co.... 44
Helios-Upton Co. ..... 44

**Paints.**
Buckeye Paint & Varnish Co..... 48
Connors, Wm. Paint Mfg. Co ..... 1
Dixon, Jos. Crucible Co..... 42
Forest City Paint Co..... 56

**Pattern Letters.**
St. Louis Electrotyping & Fdy. Co. 42

**Polish.**
Black Silk Stove Polish Works... 44
Hoffman, Geo. W..... 42
Nickel Plate Stove Polish Co..... 7
Stevens, F. B..... 43

**Radiators.**
American Radiator Co..... 2

**Registers.**
Auer Register Co..... 12
Clear, Chas..... 12
Ferrosteel Co..... 13
Mueller, L. J. Furnace Co..... 12
Schwab, R. J. & Sons Co..... 13
Stowell Mfg. & Fdy. Co ..... 13
Symonds Mfg. Co ..... 12

**Roofing.**
American Steel Roofing Co..... 46
Auld & Conger..... 44
Berger Mfg. Co. ..... 47
Clark, Quien & Morse ..... 53
Cortright Metal Roofing Co..... 44
Eller, J. H. & Co..... 43
Klauer Mfg. Co ..... 46
LaCrosse Steel Roofing & Corrugating Co ..... 47
McVoy, John & Co ..... 47
Milwaukee Corrugating Co..... 46
Osborn, The J. M. & L. A. Co..... 60
Perkins, J. L. & Co..... 1

**Roofing Slate.**
Auld & Conger..... 44

**Sash Balance.**
Pullman Mfg. Co..... 60

**Saws.**
Atkins, E. C. & Co..... 60
Disston, Henry & Sons..... 51

**Saw Sets.**
Disston, Henry & Sons..... 51
Smith & Hemenway Co ..... 54

**Scales.**
American Cutlery Co..... 54
Osgood Scale Co..... 1
Pelouze Scale Co..... 53

**Screw Drivers.**
Hurwood Mfg. Co..... 51
North Bros. Mfg. Co..... 51

**Shelves.**
Cutler Hardware Co..... 56

**Shovels.**
Avery Stamping Co., The ..... 54

**Skylights.**
Jones, J. H..... 44

**Skylight Gearing.**
Garry Iron & Steel Roofing Co.... 49
Weiss, H. & Co..... 48

**Slate Machines.**
Dwight Slate Machine Co..... 48

**Sporting Goods.**
Stevens, J. Arms & Tool Co..... 60

**Stove Bolts.**
Atlas Bolt & Screw Co..... 2

**Stove Lining.**
Connors, Wm. Paint Mfg. Co..... 1
Bridgeport Crucible Co..... 43

**Stove Patterns.**
Cope, Geo. W. Pattern Works.... 43
Gobeille Pattern Works..... 43
Milwaukee Pattern Works..... 43
Weller Pattern Co..... 43

**Stove Polish.**
Dixon, Jos. Crucible Co..... 42

**Stove Putty.**
Connors, Wm. Paint Mfg. Co..... 1

**Stove Repairs.**
Brauer, A. G..... 43
Dust, Wm. T. Co..... 43

**Stoves and Ranges.**
Beckwith, Estate of P. D..... 16
Brand Stove Co..... 8
Champion Steel Range Co..... 6
Columbus Stove Co..... 7
Eclipse Stove Co..... 4
Faultless Mfg. Co ..... 6
Home Pride Range Co..... 58
Joliet Stove Works..... 4
March-Brownback Stove Co..... 9
Pittsburgh Stove & Range Co..... 5
Simpson Stove Co..... 7
Sun Stove Co..... 5
Travilla, M ..... 1
Willard, Wm. G..... 6

**Stove Trimmings.**
Atlas Bolt & Screw Co..... 1
Columbus Bolt Wks..... 1
Howes, S. M. Co., The..... 43
Sayre Stamping Co..... 43
Taylor & Boggis Fdy. Co..... 46

**Tacks.**
Tower Mfg. Co..... 55

**Tape Measures.**
Lufkin Rule Co..... 51

**Tinners' Tools and Supplies.**
Berger Bros. Co..... 49
Clayton & Lambert Mfg. Co..... 49
Iwan Bros ..... 57
Klauer Mfg. Co..... 46
Lufkin Rule Co..... 51
McVoy, John & Co..... 47
Perkins, J. L. & Co..... 1
Sayre Stamping Co..... 43
Smith & Hemenway Co ..... 54
Stanley Rule & Level Co..... 54
Swaine, Fred J. & Co..... 48
Turner Brass Works..... 49
Weiss H. & Co..... 48
Young Mfg. Co., The ..... 59

**Tinplate.**
American Tinplate Co..... 46
Illinois Roofing & Supply Co..... 46
McClure & Co..... 60
Osborn, The J. M. & L. A. Co..... 60

**Tinware.**
Cooney & Geiger..... 60
Nat. Enameling & Stamping Co... 48
Stuber & Kuck..... 53

**Torches.**
Clayton & Lambert Mfg. Co..... 49
Turner Brass Works..... 49

**Tools.**
Hurwood Mfg. Co..... 51

**Tool Racks.**
Herrick, F. A. & Co. ..... 55

**Typewriters.**
Fox Typewriter Co..... 54

**Ventilators.**
Globe Ventilator Co..... 60
Powers Bros..... 1

**Wagons—Hardware.**
Shipman, Braut & Co..... 57

**Washing Machines.**
Brammer, H. F. Mfg. Co..... 53
Clark, Quien & Morse..... 53
Nineteen Hundred Washer Co.... 53
Voss Bros. Mfg. Co..... 52
White Lily Washer Co..... 52

**Water Supplies.**
Horrigan Supply Co..... 54

**Wrenches.**
Hurwood Mfg. Co..... 51

## NEGLECT TO ADVERTISE IS WASTED AMBIBITION.

Judicious advertising is an integral part of correct business methods. The merchant who ignores the use of printer's ink, or who blindly advertises without system or correct judgment as to value of mediums or methods, is soon known by his lack of desirable custom. The people who attempt to save money by avoiding advertising bills in this age of sharp advertisers and keen competition always find when too late that they have wasted their opportunities.—Woodbine, Ia., Chronicle.

## JUST LIKE WOMEN.

"Yes," said the engaged girl, "Dick is very methodical. He gives me one kiss when he comes in and two when he goes away."

"That's always been his way," returned her dearest friend. "I've heard lots of girls comment on it."

Thus it happens that they cease to speak to each other.

## WON BY A FAINT HEART.

"I can never marry you," said the beautiful blonde.

"But," pleaded the wealthy old man, "won't you make my life happy for the few short years I will be here? I am troubled with a weak and faint heart."

"In that case I accept you."

And yet they say faint heart never won fair lady.

## OPINION OF AN EXPERT.

"Every morning when I go out to my hencoop," wrote a woman in New Hampshire to the poultry expert of the Department of Agriculture, "I find that three or four of the hens have turned over on their backs, legs curled up, never to rise again. Please tell me what is the matter with them."

The poultry expert thought long and earnestly, then, seizing a pen, he wrote:

"Dear Madam—Your hens are dead."—Ex.

## GOOD ADVICE.

Here's a bit of advice given by one of the most successful business men and politicians in this country. He says: "Be a friend to every newspaper man, big, little, rich, poor, bad and indifferent. It pays a larger per cent of profit than any other investment that can be made."—Ex.

## A STRONG OPPOSITION.

The animals met to organize a trust.

The skunk, noticing that all the fat positions were given to others, indignantly asked:

"Where do I come in?"

"You don't come in," they replied. "You are the rank outsider."

Whereupon he withdrew to his farm in Indiana and started one of his own.—Chicago Tribune.

# Trade Report.

### BILLETS.

The demand for Billets continues, sales of larger proportions characterizing the markets. Sales are pending on 3,000 tons at $30, Youngstown, or $32.60, Chicago, for delivery during the next three months. It is reported that lower prices are being made on foreign Steel for delivery in the Central West on lower through freight rates, but local importers report it impossible to obtain supplies earlier than August shipment, with the foreign producers asking $1 a ton above last sales. Under the circumstances prices in this market for the moment are nominal. Open Hearth Steel Billets are scarce, sales being confined to jobbing lots and prices ranging from $34 to $38, according to analysis, buyer and time of delivery. Sales of 500 tons of Rods are reported at $40 for May and June shipment.

### STRUCTURAL STEEL.

The week's sales have been small and demand light. We quote mill prices, Chicago delivery: Beams and channels, 16 inches and under, 1.75c to 2c; 18 inches and over, 1.85c to 2.10c; universal plates, 1.75c to 2.10c, according to delivery; angles, 3x3 and larger, 1.75c to 2c; tees, 3x3 and larger, 1.80c to 1.90c; zees, 1.75c to 1.95c. The maximum quotations are asked by some mills and dealers on lots for quick shipment. Store trade is quoted at 2¼c to 2½c per pound.

### RAILS AND TRACK SUPPLIES.

Both standard and light rails have experienced good business during the past week. The leading local producer of light rails reports that its sales of this product in April amounted to twice the tonnage it could turn out. We quote heavy sections, 500 tons and over, $28; less than 500 tons to carload lots, $30; less than carload lots, $32; light rails, 45 pounds, $34 to $35; 12 pounds, $39 to $40, with regular differentials for intermediate size. Track supplies, mill shipments: Angle bars, 2c to 2.10c; spikes, first quality, 2.25c (out of store, carload lots, 2.35c to 2.45c rates); second quality, 2.10c; track bolts, 3½x¾, with square nuts, 2.85c to 3c per 100 pounds; with hexagon nuts, 3.05c to 3.15c, with usual differentials for other sizes.

### MERCHANT STEEL.

Contracts on tonnage have not been of large proportions, but several implement manufacturers have placed their contracts. We quote mill shipments, Chicago delivery, as follows: Spring steel, 2.65c to 2.75c; sleigh shoe, 1.95c flat sizes; concave and convex, 2c; out of store, 2.15c; cutter shoe, 2.50c to 2.60c; machinery steel, 2.15c to 2.25c base; plow steel, 2.50c and upward, according to quality; toe calk, 2.30c to 2.40c; out of stock, 3c to 3.10c; ordinary tool steel, 6c to 7c; specials, 13c and upward; less than carload lots, 5 to 10 per cent higher; cold rolled shafting, carload lots, 47 per cent off; less than carload lots, 42 per cent off.

### BARS.

Yearly requirements have been placed during the week by many implement manufacturers. Buying of bar iron has been light and specifications have fallen off. The present weakness in this product is illustrated by the statement of one producer that the specifications it received last month were 14,000 tons less than they were in April of 1902. We quote mill shipments, Chicago delivery, as follows: Bessemer steel, 1.76½c; angles, less than 3x3, 1.86½c, base; hoops in lots of 250 tons and greater, 2.06½c; less than this amount, 2.16½c; iron, 1.85c to 1.90c, though on large lots it undoubtedly can be shaded. Prices on lots from store are as follows: Steel, 2c to 2.10c; iron, 2.15c to 2.20c; hoops, 2.40c to 2.50c; angles, 2.25c rates.

### PLATES.

A good demand on plates during the week has made the market lively and premiums are paid for lots for quick shipment. Owing to the capacity of mills being taken, considerable business is turned over to jobbers. We quote mill prices, Chicago delivery: Tank steel, ¼-inch and heavier, 1.90c to 2c; flange steel, 2c to 1.10c. The official price of 1.75c remains unchanged, though material cannot be bought at this figure in this market. Prices for lots from stock: Tank steel, ¼-inch and heavier, 2.15c to 2.25c; 3-16, 2.25c to 2.35c; No. 8, 2.30c to 2.40c; No. 10, 2.35c to 2.45c; flange steel, 2.40c to 2.50c.

### SHEETS.

There has been a light buying both for mill shipments and from store, which is attributed largely to the uncertainty regarding the outcome of the conferences between metal workers and their employes on the latter's demands. We quote carload lots, Chicago delivery: Black sheets, No. 27, 2.86½c to 2.96½c; No. 28, 2.96½c to 3.01½c. Galvanized, 75 and 5 per cent. On lots from store we quote No. 27 black, 2.95c to 3c; No. 28, 3.05c to 3.10c. Galvanized, 75 and 2½ per cent.

### WIRE NAILS.

A fair number of new orders have been given during the week, but as reported last week new business continues dull. Most of the mills are busy on old contracts. The stringency in Steel Billets has been somewhat relieved, but there is still a scarcity of Rods and Billets. Shipments are more satisfactory. The jobbing trade has been less active, but fair for this season, and the market has remained firm. Official prices are $2.15 to $2.20 in carload lots, f. o. b. Chicago. Broken cars sell at 5 to 10 cents higher. For galvanizing 75 cents per keg and for thinning $1.50 extra per keg is charged.

### CUT NAILS.

The supply of Steel has increased some, but the mills still find considerable difficulty in making prompt shipments. Manufacturers are busy on specifications received on account of old contracts, but there is less new business coming forward. The tone of the market is firm, without change in prices previously current, which are on the basis of $2.30 in carload lots and $2.35 in less than carload lots for Steel, Chicago. Iron Nails are held at $2.45 to $2.50 per keg from store.

### BARB WIRE.

The new orders coming forward have been for small amounts and the aggregate tonnage has not been large, but the mills are still busy on old contracts, specifications being received to a liberal amount. The jobbing trade has shown some falling off, but the tone of the market has continued firm. Galvanized Wire has been sold on the basis of $2.75 to $2.80 in carload lots, and Painted at $2.45 to $2.50, the outside price being to retailers. For small lots 5 to 10 cents extra is charged. Staples in carload lots sell as follows: Polished, $2.30 to $2.35, and Galvanized $2.70 to $2.75, the outside price being to retailers.

### BINDER TWINE.

Products outside of the combined companies have quite generally advanced prices for Sisal and Standard Twine, while other grades have not been affected. A number of the Eastern and Western manufacturers have also withdrawn from the market and but little Twine is being offered, so that in the absence of business it is difficult to determine what prices rule. In the West there has been a feeling that the combined companies will make no changes in prices when they again offer Twine for sale. The following may serve as a guide regarding possible quotations, f. o. b. Eastern mills, with ¼ cent per pound rebate in carload lots: Sisal, 10¼c. to 11¼c.; Standard, 10¼c. to 11¼c.; Standard Manila (550 feet), 11c.; Manila (600 feet), 11¾c.; Pure Manila (650 feet), 12¾c.

### AXES.

The prices on axes have had an additional reduction of 25 cents per dozen. The Kelly Axe Manufacturing Co. and the American Axe & Tool Co., the two principal axe manufacturing concerns in the country, are the leaders, and it is necessary for the smaller concerns to follow their prices if they expect to get trade. Many of them have been forced to leave the field or have done so voluntarily rather than do business at prices now quoted. The cost of making axes has increased, and many argue that the price will be advanced after the present fight is over, while others believe that the present demoralized condition of the market will lead to the formation of a combine between the manufacturers on a basis similar to that proposed last year. The price cutting has thus far been confined to the domestic trade.

### ROPE.

Sisal rope is quoted at 9¼c. per pound.

### HAY RACK BRACKETS.

Wenselmann's hay rack brackets No. 1 are $12.60 per dozen sets; No. 2 are $13.20 per dozen sets.

### MOLASSES AND OIL GATES.

Perfection Molasses and Oil Gates are quoted at a discount of 50 and 5 per cent.

### SCREEN WIRE CLOTH.

Twelve mesh painted screen wire cloth is quoted at $1.20 per 100 square feet.

### TIN.

Tin is quiet and firm. The New York closing on May 5th was 30@30⅛c for spot to May for round lots. The jobbing price is steady at 31@32c.

### TIN PLATES.

Tin plates are steady with the jobbing quotations unchanged at: Melyn, $6.50@7; Alloway, $5.75@6.25; coke, 4.87½@6.50; ternes, $5.25@8; additional X, $1.50@1.75 more.

### LEAD.

Lead is quiet but steady, the latest quotations on the New York Exchange being 4.37½c. St. Louis steady at 4.27½c; manufactured pipe, 7⅛c; sheet, 7¾c; tin pipe, 50c; tin-lined pipe, 12½c; old lead, in exchange, 4¼c; lead, 3¾c.

### SPELTER.

Spelter is steady at: Round lots, New York, 5.75c for spot and May; jobbing, 5⅝@5⅞c; sheet zinc, cask lots, 7¼@8c; small lots, 7½@8½c; St. Louis market is quoted quiet at 5.40c for prompt shipment.

### ANTIMONY.

Antimony is dull and depressed: Cookson's, 8¼c; Hallett's, 6¾@6⅞c; United States, Star and other brands, 6½c. The above prices are for round lots in New York; small lots, Hallett's, would cost 7@7¼c in New York.

### NICKEL.

Nickel is steady at 40@47c for large lots. Small lots as high as 60c.

### PLATINUM.

Platinum is firm, with a good demand: New York, $19 per oz for large lots.

### QUICKSILVER.

Quicksilver is steady: New York, $47.50 per flask for large lots; small orders, more. San Francisco, steady at $44.50@46, domestic orders; exports, $42@43. London is steady at £8 12s 6d.

### ALUMINUM.

Aluminum is quiet and unchanged: No. 1 ingot, 33@37c per lb; No. 2, 31@34c; rolled sheet, 4c and up.

# Current Hardware and Metal Prices.

**THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.**

## METALS.

### FIRST QUALITY BRIGHT PLATES.

| | | Per Box. |
|---|---|---|
| IC | 14x14 | $10 25 |
| IC | 14x20 | 7 85 |
| IX | 14x20 | 9 10 |
| IXX | 14x20 | 10 35 |
| IXXX | 14x20 | 11 60 |
| IXXXX | 14x20 | 12 85 |
| IC | 20x28 | 15 45 |
| IX | 20x28 | 17 95 |
| IXX | 20x28 | 20 45 |

### COKE PLATES.

| | | | |
|---|---|---|---|
| Cokes, 180 lbs | IC | 20x28 | 9 15 |
| Cokes, 200 lbs | IC | 20x28 | 9 35 |
| Cokes, 216 lbs | IC | 20x28 | 9 65 |
| Cokes, 216 lbs | IX | 20x28 | 11 75 |

### PIG IRON.

| | |
|---|---|
| Lake Sup. Charcoal | $24 00@$25 00 |
| Local Coke Fdy No. 1 | 22 00@ 22 50 |
| Local Coke Fdy No. 2 | 21 50@ 22 00 |
| Local Coke Fdy No. 3 | 21 00@ 21 50 |
| Local Scotch Fdy No. 1 | 22 00@ 22 50 |
| Ohio Strong Softeners, No. 1 | 24 00@ 24 50 |
| Southern Silvery | 23 35@ 24 35 |
| Southern Coke No. 1 | 21 35@ 22 35 |
| Southern Coke No. 2 | 20 85@ 21 85 |
| Southern Coke No. 3 | 20 35@ 21 35 |
| Southern Coke No. 4 | 19 85@ 20 85 |
| Southern No. 1 Soft | 21 85@ 22 35 |
| Southern No. 2 Soft | 20 85@ 21 85 |
| Alabama Car Wheel | 28 35@ 29 35 |
| Malleable Bessemer | 21 50@ 22 00 |
| Jackson Co. Silvery | 29 30@ 30 30 |

### BLACK SHEET STEEL.

| | | |
|---|---|---|
| No. 16 | per 100 lbs. | $2 65 |
| No. 18 20 | per 100 lbs. | 2 75 |
| No. 22 24 | per 100 lbs. | 2 85 |
| No. 25 26 | per 100 lbs. | 2 95 |
| No. 27 | per 100 lbs. | 3 05 |
| No. 28 | per 100 lbs. | 3 15 |
| No. 29 | per 100 lbs. | 3 30 |

### SMOOTH STEEL.

| | | |
|---|---|---|
| Wood's Smooth | No. 15-17 | 2 85 |
| " " | No. 18 | 2 95 |
| " " | No. 20 | 3 05 |
| " " | No. 22-24 | 3 15 |
| " " | No. 25-26 | 3 25 |
| " " | No. 27 | 3 35 |
| " " | No. 28 | 3 45 |

### PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

### GALVANIZED IRON

F.O.B Chicago ..... 70&10%

### HOOP IRON.

| ¾x22 | ¾x20 | ⅞x20 |
|---|---|---|
| $3 20 100lbs. | $3 10 100lbs. | $3 00 100lbs. |
| 1x20 | 1¼x19 | 1½x19 |
| $3 90 100lbs. | $3 85 100lbs. | $3 75 100lbs. |

### PAINTED CORRUGATED IRON.

8 x 2½ feet Sheets, 28 gage, per 100 lbs. ..... $2 50

### SOLDER.

| | |
|---|---|
| XXX Guaranteed ½&½ | per lb. 20¾c |
| Commercial ½&½ | per lb. 20¼c |
| No. 1 Plumbers | 17¾c |

### SHEET ZINC.

| | |
|---|---|
| 600 lb. Casks | base, per cwt. $6.90 |
| 300 lb. Casks | per cwt. 7.10 |
| Sheets | per cwt. 7.15 |

### COPPER.

Copper ..... base, 24c

### TIN PIGS AND BARS.

| | |
|---|---|
| Banca, pigs, per lb | 35@35½c |
| Straits pigs, per lb | 35c |
| Straits in bars, per lb | 37c |

### LEAD.

| | |
|---|---|
| American Pig | $4 60@4 62½c |
| Bar | 6¼ |
| National (White) brands (in less than 100 lb. lots) per lb | 7½c |

## HARDWARE.

### ADZES.

*Carpenters'.*
Ajax ..... 50¢
Blood's ..... 40&5%
Hunt's ..... 25%
White's ..... 12½¢

*Coopers'.*
Barton's ..... 20%
White's ..... 15%

*Ship.*
Ajax ..... 50¢
Blood's ..... 40&5%
Hunt's ..... 25%
White's ..... 12½¢

### AMMUNITION.

*Caps, Percussion—per 1,000.*
F L Waterproof, 1-10s ..... 40c
G D ..... 35c
Eley's ..... 52c

*Cartridges.*
Peters Rim Fire Ctgs ..... 50&3%
Peters Cent Fire, Pistol & Rifle 25&3%
Peters Cent Fire, Military and Sporting Ctgs ..... 15&8%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.
Peters Blank Ctgs. 22 cal ..... $1 18
Peters Blank Ctgs. 32 cal., C. F .. 4 40
Peters B B Caps, Round ball ..... $1 44
Peters B B Caps, Conical ball ... $1 85
U. M. C. Rim Fire Ctgs ..... 50&3%
U. M. C. Cent. Fire, Pistol & Rifle 25&3%
Winchester Cent. Fire, Military and Sporting Ctgs ..... 15&8%
U. M. C. B B Caps, Round Ball ..... $1 75 .. 18%
U. M. C. B B Caps, Con. Ball. $1 85 net
U. M. C. Rim Fire Shot Ctgs. 50&15&3%
U. M. C. Cent. " " " 25&15&3%

*Primers.*
Berdan Primers ..... $1 00
Peters Primers ..... 1 20
U. M. C. Primers ..... 1 20
Winchester Primers ..... 1 20

*Shells.*
Peters Empty Paper Shells, 10 and 12 gauge. League ..... 25&2%
Peters Empty Paper Shells, 16 gauge. League ..... 20&2%
Peters New Victor Nitro Shls .. 20&2%
Ideal ..... 25&7%
Peters Loaded Shells. League and Referee Semi-Smokeless. 40&1%
Peters New Victor Loaded Shells with King's Smokeless ..... 40&6%
Ideals Loaded with King's Smokeless ..... 40&10&10&1%
U. M. C. New Club, 16 gauge .... 20&2%
U. M. C. New Club ..... 25&2%
U. M. C. Nitro ..... 20&2%
U. M. C. High Base ..... 20&2%
Winchester Blue Rivals ..... } 40&1%
Winchester Yellow Rivals ..... }
Winchester Repeater ..... 20&2%
Winchester Leader ..... 40&6%
U. M. C. Loaded Shells, Black Powder ..... } 40&1% full cases
Winchester Loaded Shells, Black Powder ..... }
U. M. C. ..... } Smokeless 40&10&10&1% full cases
Winchester ..... }

*Gun Wads—per 1,000.*
Peters Gun Wads ..... 18%
U. M. C. Gun Wads ..... 18%

*Powder.* Each
King's Smokeless, kegs ..... $11 30
" " ½ kegs ..... 5 80
" " ¼ kegs ..... 2 97
" " 1-lb. cans ..... 51
" " 1-lb. " rifle ..... 70
Dupont's " 50-lb. drum .. 22 45
" " 25-lb. kegs .. 11 30
" " 12½-lb. kegs. 5 80
" " 6¼-lb. kegs .. 2 97
" " 1-lb. cans .... 51

*Shot.*
Dropshot, sizes smaller than B, 25-lb. bags, per bag ..... $1 40
Drop shot, B and larger sizes, 25-lb. bags, per bag ..... 1 65
Buck Shot, 25-lb. bags, per bag .. 1 65
Chilled Shot, 25-lb. bags, per bag. 1 65

### ANVILS.

Trenton, 70 to 80 lbs ..... 9¾c per lb
Trenton, 81 to 150 lbs ..... 9c per lb

### AUGERS.

*Boring Machine* ..... 60&10&5%
*Carpenters' Nut* ..... 60&10&5%
*Hollow:*
Ives' New Pattern ..... 25%
Bonney's—list $30.00 ..... 65&10%
Stearn's, No. 1 ..... doz. $4 00
Stearn's, No. 3 ..... " 33 50
*Post Hole.*
Dalbey, 8-inch ..... per doz. $ 5 75
Digwell, 8-inch ..... " 13 00
Howe's, 6 and 8-inch .. " 12 50
Vaughan's, 4 to 9-inch " 7 00
*Rafting.*
Snell's ..... 50&5%
*Ship.*
Snell's, with or without screw ..... 40&5%

### AWLS.

*Brad*, handled ..... per doz. $0 2
shouldered, ass'd, 1 to 4 ..... per gr. 1 1
patent, asst'd, 1 to 4 " 9
*Harness*, common ..... " 1 2
patent ..... " 9
*Peg*, shouldered ..... " 1 1
patent ..... " 4
*Scratch*, No. 3, handled ... " 4 5
No. 1, socket handled ..... per doz. 1 1
*Sewing*, common ..... per gr. 1 1
patent ..... " 9

### AXES.

*Boys', Handled:*
Camp Fire, 3-lb., per doz ..... $5 7
" " 4-lb., freighters', per doz ..... 6 7
Cast Steel, good grade, pr. dz., 5 5
Pioneer, per doz ..... 6 7

*Broad:*
Peerless ..... 50%
Plumb's Canada Pattern, ¼ 50-10-5%
" Western " 40-10-5%
Red Warrior, per doz ..... $18 5

*Firemen's*, per doz ..... 15 5

*Single Bitted* (without handles)
Gladstone, per doz ..... $7 25
Hubbard's " " ..... 6 5
Hunt's " " ..... 6 50
Lippincott's " " ..... 6 50
Mann's " " ..... 6 5
Pioneer " " ..... 6 7
U. S. A. " " ..... 7 7
Valley Forge " " ..... 6 00
Second Quality " " ..... 5 75

*Double Bitted (without handles):*
Lippincott's ..... per doz $8 50
Mann's ..... " " 8 50
Pioneer ..... " " 9 25
U. S. A. ..... " " 11 00
Valley Forge ..... " " 8 25
*Ship*, Blood s ..... " " 18 50

### BALANCES, SPRING.

Frary's ..... 50¢
Pelouze ..... 30¢

### BAGS, PAPER NAIL.

| Pounds.. | 3 | 5 | 10 | 16 | 20 | 25 |
|---|---|---|---|---|---|---|
| Per 1,000. | $1 60 | 1 85 | 2 60 | 3 40 | 3 90 | 4 75 |

### BARS, CROW.

Pinch or Wedge Point ..... cwt. $3 40

### BEAMS—SCALE.

P. S. & W. Co ..... 40%

### BEATERS.

*Carpet*, Rattan ..... per doz $2 40
Raymond's Steel Wire, " " 80
Woven Wire, No. 4 .. " " 1 10

*Egg.*
Dover Pattern ..... per doz. $0 70
Genuine Dover ..... " 0 90
Mammoth Dover ..... " 1 75
Lightning ..... " 0 84
Lyon's (standard size) " 1 75
Whip, French ..... " 1 35
Spiral ..... " 0 40
Spoon ..... " 0 40
Surprise ..... per gro. 1 45

### BELLOWS.

*Blacksmiths'* ..... 70&5%
*Hand*, 8 in ..... per doz. $ 6 85
10 in ..... " 8 40
*Molders'*, 12 in ..... per doz. 13 00

### BELLS.

*Call.*
2¾ in. nickeled bell . per doz. $ 1 35
2¾ in. " brass bell " 3 60
3 in. " " " " 7 5
3 in. " silver alloy bell, ..... per doz. 16 50
4½ in. " brass bell and base ..... per doz. 14 50

*Cow.*
Ordinary Goods ..... 70&5%
High Grade ..... 60&10%
Jersey ..... 70&10%

*Door.*
Bigelow Automatic .. per doz. $9 50
Rotary.
3 in. bronzed iron bell " 5 25
3 in. nickeled " " " " 7 50
3½ in. " " " " 9 00

*Hand.*
Hand Bells, Polished ... 60@60&10%
White Metal ..... 50¢
Nickel Plated ..... 40¢
Swiss ..... 60&5%
Silver Chime ..... 33⅓¢

*Miscellaneous.*
Church and School, Steel Alloy, ..... 50, 10 & 5¢
Farm, lbs.. 40 50 75 100
Each. $1 10 $1 30 $1 85 $2 65

*Miscellaneous Cont*
Strapped Sheep ..... per doz. $1 90
House Gong ..... 40&5¢
Sleigh, Round, Loose ..... 40&5¢

### BELTING

*Leather*—List dated Nov. 12, 1901.
Standard ..... 75¢
Eclipse ..... 60&10%
Extra Grade ..... 50&10%

*Rubber—*
Standard ..... 75&5%
Amherst ..... 65&10%
Extra ..... 60&2½%

### BEVELS—TEE.

Stanley's, rosewood handle, new list ..... 40&5%
Stanley' iron handle ..... 40&5%

### BINDING—OIL CLOTH.

Zinc ..... 75, & 10%
Brass ..... 75%
Brass Plated ..... 75 & 10%

### BITS.

*Auger.*
Extra Double Spur ..... 70&5%
Ford Improved ..... 40&10%
Irwin ..... 30&10%
New Jenning's ..... 5 %
Russell Jenning's ..... 25&7½%
Clark's Expansive ..... 50, 10&5%
Steer's " Small ..... new list ..... $22.00
Irwin Car ..... 30&10%
Snell's Car ..... 60&5 %
" Ship ..... 40&5%
" " Auger Pattern Car .. 40&5%

*Center* ..... 40&10%

*Countersink—*
Wheeler's ..... per doz. $1 60
American Snail Head " 0 70
" Rose " " 0 80
" Flat ..... " 0 70
Buck Bros'. Flat ..... " 2 60
German ..... " 0 70

*Dowel*, New Jennings ..... 40&10%

*Gimlet—*
Standard Double Cut 50&5@50&10%
German Pattern ..... per doz. $0 48
Gouge ..... " 0 80
Spoon ..... " 0 80
Countersink ..... " 1 20

*Reamer—*
Buck Bros.' ½ Round. " 2 75
" " Square .. " 2 50
Standard ½ Round ... " 0 75
" Square ..... " 0 75
German Octagon ..... " 0 75

*Screw Driver—*
Round Shank ..... " 0 48
" " extra quality " 1 40
Square Shank ..... " 1 10

### BLACKING—STOVE. (See Polish.)

### BLADES—SAW.

*Butchers'—*
Standard ¾ & 1¼in ..... 60&5%
Clock Spring ..... 60&5%
Star ..... 20%

*Hack—*
Disston's ..... 25&5%
Griffin's ..... 35&5%
Star ..... 20%

*Wood—*
Jackson's ..... per doz. $2 25
Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.
W. M. & Co.'s No. 20 .. per doz. $5 50

### BLOCKS.

*Snatch—*
Wooden ..... 50&10%
Steel ..... 40&10%

*Tackle—*
Wooden ..... 70&5%
Steel ..... 50, 10&5%

### BOARDS.

*Stove* ..... 40%

*Wash—*
Anchor ..... per doz. $1 60
Globe ..... " 2 10
Banner ..... " 2 60
Crystal ..... " 3 15
Brass King ..... " 3 15
Nickel Plate ..... " 3 15
Enamel King ..... " 3 15

### BOBS PLUMB.

*Carpenters'*, 8½ oz. Iron .. pr dz. $0 65
1½ lb. " " " 1 60
2¾ lb. " " " 1 80
13 oz. lead ... " 3 00
6½ oz. brass. " 3 30
*Mason's*, 3 lb. lead ..... " 4 00

### BOILERS—FARM.

Profit ..... 30&5%
Solon ..... 35&5%

### BOLTS.

*Carriage, Machine, Etc.*
Carriage ..... 60&5%
Machine ..... 60&5%
Elevator ..... 50-10&5%
Plow ..... 45&5%
Stove ..... 50-5%
Tire ..... 72½&5%
Wagon Box Strap ..... 70&10%

*Mortise Door—*
Gem ..... 50-10&5%
Ives' ..... 50&10%

*Barrel—*
Cast ..... 50%
Wrought ..... 50&5%
" Bronzed ..... 75&5%

*Flush*, Wrought, B. K ..... 40&5%

*Spring—*
Wrought ..... 75&10%
" Brass ..... 75&10%

*Square—*
Cast ..... 40%
Wrought ..... 60-10&10%

BORERS.

*Angular*, Miller's Falls, per doz $12 75
*Bung*, Common Ring with Handle—
Inches..... 1½ 1¾ 2
Per doz ..... $6 00 6 90 8 10
Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each....25-10&5%

BOXES.

*Mail*, No..... 5 10 20
Per doz..... $3 65 10 50 13 00
*Mitre*—
New Langdon.....15&5%
Olmsted's .....15%
Stanley's.....30%
Seavey's.....per doz 8 00
*Twine*, Nos... 20 30 25 121
Per doz ....$1 50

BRACES.

Common Ball.....$1 35@1 45
Barbers' Pattern .....60&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146.....50&10&7½%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.

*Hay-Rack*, Wenzelmann's No. 1, $12.60; No. 2, $13.20 per doz.
*Shelf*—
Cast Iron, Plain .....50&10%
Stanley's Wrought Steel.....
..... 70-10&2½%
Wire.....75-10&5%

BROILERS.

Wire .....70&10%
Crown, Self-Basting, No.80..doz. $2 90

BUCKETS.

*Pump Rubber*—
Wychoff.....per gr. $4 75
Cooper..... " 5 50
Champion ..... " 7 50
Victor ..... " 9 50
Star..... " 5 00
IXL... ..... " 6 75
*Well*—
Galv'd Qts..... 8 10 12
Per doz .....$2 50 2 85 3 15
Wooden, top ear, plain, per doz 3 40
" " swivel " 4 60
" side-strap, plain " 3 50
" " swivel " 4 75

BUCKS, SAW.

Folding .....per doz $1 75

BURS, RIVETING.

Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.

*Cast-Iron*.....65&10%
*Wrought Brass*.....20%
*Wrought Steel Bright*—
Nos. 800, 804, 808, 810, 814 and 834 ..... 70-10-10&5%
Nos. 838, 840 and 842 ...70-10-10&5%
Nos. 822 and 828..... 75-25-10-10&5%
*Wrought Steel, Japanned*—
Nos. 731 and 737.....70&10&10%

CALIPERS.

Double .....40&10%
Inside and Outside.....40&10%
Wing.....40&5%

CALKS.

*Logger's Boot*,(Lufkin R. Co's.) .....per M $3 6[illegible]
*Toe*.
Shoenberger.....per lb. 5c
Bessemer ..... " 5¼c
American ..... " 7¼c
Swedes..... " 8¾c

CANS.

*Cheese Factory Can Stock*—
Gallons.... 15 20 30 40
Per set....$2 90 $3 15 $3 75 $4 75
*Milk Cans*—Gals.. 5 8 10
Elgin Pat., each, $ $2 00 $2 25
Iowa " 1 65 1 90 2 [illegible]
New Elgin" 2 10 2 25
New York " 2 10 2 3[illegible]
*Oil*—
1 Gal. glass, Daisy....per doz. $2 3[illegible]
1 " cushioned " 3 9[illegible]
Star, gals..... 1 2 3
Per doz..... $1 85 $3 00 $3 9[illegible]
Per doz.
Champion Faucet, 5 gallon...$ 5 6[illegible]
Sterling Tilting....5 " ... 8 25
"High C" Pump...5 " ... 9 2[illegible]
Eureka Pump.....5 " ... 12 2[illegible]
Wood Jacket .....50-10&5%

CAPS—GUN.

See Ammunition.

CARRIERS.

*Hay*—
Myers' Imperial.....each $3 40
" Clover Leaf..... " 3 40

CARTRIDGES.

See Ammunition.

CASTERS.

*Acme*—Ball Bearing.....35%
*Bed*.....65&10%
*Common Plate*—
Brass wheel.....60&10%
Iron and porcelain wheel.....60%
*Philadelphia Plate*.....70%
*Martin's*.....40-10&5%
*Payson's*.....75%
*Tucker's*—Wood and iron wheel..70%
" Rubber wheel.....65&10%

CATCHERS—GRASS

Lieder's No. 1.....per doz. $6 25
Eureka..... " 4 25
Ideal No. 4..... 50

CHAIN AND CHAINS.

*Breast Chains*—
Doubleslack.....doz. pairs $5 00
With Covert snaps " 4 75
" slide..... " 2 90
Without slide..... " 2 60
*Bright Ox Chains*—
5-16in. $6 75; ⅜ in. $5 75 per 100 lbs
*Bright Coil Chain*—
American, new list.....33⅓%
German..... ...60-10&5
Triumph, new list.....30%
*Cable Coil Chain*—
Inch..... 3-16 ¼ 5-16 ⅜
Per 100 lbs....$9 75 $7 25 $5 90 $4 75
Inch ..... 7-16 ½ ⅝ ¾
Per 100 lbs...$4 60 $4 50 $4 35 $4 25
*Cable Log Chain*—Advance 25c per 100 lbs. on Cable Coil.
*Cow Tie Chains*—
American 2 toggle.....40-10 & 5%
" toggle and snap, 40-10&5%
" open and closed ring.....40&5%
*Halter Chains*—
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph " .....30%
*Jack Chain*—
Brass.....60%
Iron.....60%
*Picture Chains*—
Light Brass, 3 ft.....per doz. 63c
Heavy " 3 " ..... " 75c
*Pump Chain*—Galvanized per 100 lbs..... $4 45
*Safety Chain*—Brass.....60&10%
*Stretcher Chains*—
5-16 in., $7.75—⅜ in., $7.00 per 100 lbs.
*Tie-Out Chains*—Browns.....70&10%
*Trace Chains*—Western Standard—
6½— 6-2.....per pair 26c
6½— 8-2..... " 30c
6½— 8-3..... " 29c
6½—10-2..... " 35c
7 —10-2..... " 40c
Add 2c per pair for Hooks.
" 2c " for Twist Link.
*Wagon Stay Chains*—
Inch ¼ 5-16 ⅜
Per 100 lbs. $6.50 $6.00 $5.25
*Well Chains*—
With Swivel.....per doz. 95c
Without " ..... " 80c

CHALK-CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c
D. M. Steward Mfg. Co.
Metal Workers' Crayons, .....gr.$2.50
Soapstone Pencils, round flat or square..... ..gr.$1.50
Rolling Mill rayons.gr.$2.50
Railroad Crayons (compo sition) gr.$2.00
Case lots 20%

CHARCOAL.

In barrels .....per bu. 21c

CHECKS-DOOR.

Blount ..... 30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....50, 10&5%

CHISELS.

*Box*—
Inches..... 10 12 14
Round....per doz. $2.10 $2.25 $2.75
Flat.....per doz. 2.85 3.60 4.20
*Cold*—
Good quality.....per lb. 12@ 20c
U.S.A.,extra quality..per lb. 28c
*Socket, Framing and Firmer*—
Barton's..... 20%
P. S. & W. Co's..... 70%
For beveled back, add..per doz..... 60c
*Tanged, Firmer*—
P. S. & W. Co's.....35&5%
With Handles add... per doz. 60c
*Choppers, Enterprise Meat*—
No. 12.....$2 75
No. 22..... 4 50

CHUCKS-DRILL.

Standard Tool Co.'s .....40%
Goodell's, for Goodell's Screw Drivers.....per doz. $6.25
Yankee, for Yankee Screw Drivers..... 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each ..... $3.85 4.10 4.30
Belle, Barrel..... 70%
Common Dash, Gal.... 4 5 7
Per doz..... $6.75 7.50 8.00
Union, Gal..... 5 7 10
Each ..... $3.65 3.90 5.00

CLAMPS

*Adjustable*—Martin's ..... 40%
*Carpenters'*—Steel Bar..... 30%
*Carriage Makers'*—P. S. & W. Co.'s..... .....40, 10&5%
*Hose*—
Sherman's, brass, ¾ in., .....per doz. 33c
Double, brass, ¾ in...per doz. 65c
*Saw Filers*—
Disston's list, $30 00..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50. No. 3, $5.50 doz.
Wentworth's..... 40%

CLAWS-TACK.

Cast, wood hdle...per doz., 45@ 60c
Forged steel, wood handle .....per doz. 80c
Solid Steel.....per doz. $1.60
Giant.....per doz. .60

CLEANERS.

*Pot*—Wire.....per doz. $0.45
*Side-Walk*—Steel..... per doz. 3.15
*Window*—
Peerless.....50, 10&5%
XLCR.....65&10%

CLEAVERS.

*Butchers'* F. E. Plumb's..... 33⅓%
*Family*—Ajax, In..... 6 7 8
Per doz ..... $5.50 5.75 6.25

CLEVISES.

Malleable.....per lb. 4¼c

CLIPS.

*Axle*.....65&5%
*Damper*—
Standard .....per doz. $0.70
Troy ..... " .38
*Hame*..... " .20

CLOTH.

*Emery*—
Ajax.....50&10
B. & A.....50
*Hardware Wire*—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.
*Screen Wire*—
12 mesh, painted, per 100 sq. ft. $1.20
14 " " " " 1.85

COCKS—BRASS.

Compression Bibb.....60&10&5%
" Lock.....60&10%
Lever Bibb.....60&10%
Liquor .....per doz..$6 75
Racking .....60&10%

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

COLLARS—STOVE PIPE.

Inches 5 6 7
*Plain Tin*....per gr.$2.50 $2.80 $3 75
*Japanned Tin*, " 3.90 4.20 5.40
*Lacquered Brass*" 3.30 3.60 4.80

COMBS—CURRY.

Nos. 000 20 321 330 417 416
Per doz.$0.32 .80 1.00 .95 .80 1.00
Nos. 531 533 530 535 545 390
Per doz $0.96 1.20 1.10 1.65 1.40 1.30

COMPASSES.

*Carpenter's*..... 70%
*Pencil*—Faber's.....per doz.$1.00

COOLERS—WATER.

*Galvanized Lined*—Lever Faucet.
Gal. 2 3 4 6 8
Each $1.35 1.65 2.00 2.35 2.95
*Galvanized Lined*—Telegraph Faucet
Gal. 2 3 4 6 8 10 15
Ea$1.65 2.00 2.35 2.65 3.30 3.65 4.90
*Porcelain Lined*—
Gal. 3 4 5 6 7 8 10
Ea$4.50 5.75 7.00 7.75 8.60 10.40 12.25

COPPER—See Metals.

COPPERS.

*Soldering*—1 to 2 lb.....per lb. 25@29c
3 lb. and larger..... " 23c

CORD.

*Picture*—White Wire—List October 1900.....80&10%
*Sash*—
Baltic Braided Flax...per lb. 18½c
India Hemp, cable laid " 13 c
" " hawser " " 12 c
" " plain " " 13½c
Italian " cable " " 21½c
Russian " " " " 17 c
Samson, white " 31½c
" spot " 30½c
Silver Lake, white " 24½c
" " drab " 31½c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS—SPRING.

5-16 in. and smaller..... .....80&5%
⅜-in. and larger.....75%

COUPLINGS—HOSE.

Brass .....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON—See Tents.

CRADLES—GRAIN.

Morgan's Grapevine ..per doz.$21 00

CRAYONS—See Chalk.

CROOKS—SHEPHERDS'.

American Pattern .....per doz. $6 75
Montana " ..... " 8 00
Scotland " ..... " 8 00

CROW BARS.

Pinch or Wedge Point, per 100 lbs ..... $3 40

CUTTERS.

*Meat*—
Enterprise Nos. 5, 10, 12, 22, 32, and 42..... .....25%
No. 100, list, $18.00.....40&10%
Nos. 2 and 4.....35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00
*Pipe*-Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00
*Slaw and Crout*—
3-knife Crout.....per doz. $9.25
1 " Slaw..... " 1.35
2 " " ..... " 2.00
*Washer*..... " 7.75

DAMPERS—STOVE PIPE.

Standard.....50&10%
American.....40&10%

DIES—STOCKS AND

Discount..... .. 40%

DIVIDERS.

Wing ..... 70%
Extension Wing..... .. 35&5%

DIGGERS—POST HOLE.

Atlas.....per doz. $8.50
Eagle..... " 6.25
Eureka..... " 6.50
Hercules ..... " 10.25
Ryan's..... " 17.00
See also Augers—Post Hole.

DOORS—SCREEN.

⅞ in. 4 panel painted per doz. $ 6.75
⅛⅛ " " " " 7.25
in. 4 panel natural pine, fancy.....per doz.. 11.25

DOOR HANGERS—BARN.

Single Flange, D. B. Rail, .....per 100 ft. 1 60
Novelty Check Back, ..... 3 in 4 in 5 in 6 in
Per doz. pairs, $2.60 $3.90 $4.95 $6.25

DRILLS.

*Bit Stock*.....60%&65&5%
*Blacksmith's Twist*.....60%
*Breast*—
Common.....each, $2.25
Millers' Falls..... " 2.10
*Hand*—
Goodell's Automatic—per doz.
No. 01 No. 03 No. 3 No 20
$7.75 $12.50 $14.25 $11.00
Goodell's Single Gear per doz. $16.00
Millers' Falls " " " 12.50
" " Double " " 15.00
*Reciprocating*—
Goodells'.....per doz. $17 00
*Bit Stock*.
Standard List....60&5%@60%@10%

DRIVERS—SCREW.

Standard.....65&10%
Ajax.....70&5%
Champion..... 50%
" Pattern.....75&5%
Clark's Interchangeable.. ..... 33⅓%
Reed's Lightning.....50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet.....50%
" " Spiral.....50&10&5%

ELBOWS.

*Conductor*.....60%
*Adjustable Stove*—In. 5 6 7
Smooth....per doz. $0.95 0.95 1.40
Plan'd..... " 2.10 2.35 3.00
*Corrugated Stove*—In. 5 6 7
Smooth.....per doz. $0.95 .95 1.40
Pol'd..... " 1.70 1.75 2.60
Plan'd..... " 2.60 2.85 3.50
*Four-Piece Stove*—In. 5 6 7
Smooth....per doz. $0.57 .60 .93
Pol'd..... " 1.00 1.05 1.50
Plan'd..... " 1.50 1.70 2.60

EMERY—TURKISH.

Size ..... 5 lb. pkgs. ½ kegs. kegs.
No. 60 to 150, ℔ lb. 6¼c 4¾c 4¼c
Flour.... . " 5¼c 3¾c 3¼c

ENAMEL—IRON.

English, ¼-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. B., " " ... " 1 25
Peerless ..... 1 50

EXTRACTORS—PIG.

See Forceps, Pig.

EYES.

*Bright Wire Screw*—See Goods, B.W.
*Drifting Pick*.....60&10%
*Hooks and*—
Brass.....60&5%
Iron .....65&10%

FASTENERS, STORM SASH.

Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... ..... " 1 10

FASTENERS, BLIND.

Zimmerman's.....Net

FAUCETS.

*Angle Plug*.....per doz. $0 84
*Brass*—Andrew's .....60&10%
*Petroleum*.....60-10&5%
*Wood*—Cedar .....40&50%
Cork Lined..... 60%
Metal Key.....65&5%
*Measuring*—Enterprise.....35&5%
See also Cocks.

FILES AND RASPS

Arcade .....75&5%
Black Diamond.....70&10%
Disston's.....75&10%
Great Western.....75&5%
Keystone Mill.....80&20%
Kearney & Foote .....75&5%
Mill, 2d quality.....80&10&5%
New American .....75&10&5%
Nicholson's.....70&10%
Royal Mill .....80@20%
N. S. A.....70&10&5%

FILTERS.

Improved Natural Stone.$2 50@13 50
Subject to large discounts.

FORCEPS—PIG

Barber's.....per doz., $7 25
Superior..... " 4 75
Whisson's Imp..... 6 00

FORKS

*Barley*—
Steel.....66⅔, 10&5%
Wood, 4 tines, $5.25; 6 tines, $6.25 doz
*Coal*.....70, 10&2½%
*Coke*.....70, 10&2½%
*Cottonseed*.....70, 10&2½%
*Hay*—
Diamond, 2 tine.....65, 10&5%
" 3 " .....60, 7½, 10&5%
" 4 " .....66⅔, 10&5%
Golden Eagle, tine 60,7½,10,10&5%
" " " .,66⅔,10,10&5%
*Potato*—
Digging..... .....65&10&5%
Scoop .....70&10&5%

FORKS—CONTINUED.

*Header—*
Diamond, 2 tine.....67½&10&5%
" 3 " .....60, 20, 10&5%
" 4 " .....66⅔&10&5%
Golden Eagle, 4 tine.....10&10&5%
*Manure—*
Diamond .....60, 20, 10&5%
Golden Eagle.....60, 20, 20&5%
*Ore*.....70&10%
*Spading—*
Diamond .....70, 5, 10&5%
Golden Eagle.....70, 5, 10, 10&5%
*Hack Saw—* FRAMES
Crown.....per doz., $ 8 75
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM

*Arctic*—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 75 2 30
Qts..... 8 10 12 15
Each.....$2 85 3 75 4 50 5 20
*White Mountain*, with Crank—
Qts..... 1 2 3 4 6
Each.....$1 20 1 65 1 90 2 10 2 70
Qts..... 8 10 12 15
Each.....$3 60 4 60 5 90 7 00

GATES.

*Molasses and Oil.*
Perfection.....50&5%
Stebbin's.....75&10&5%

GAUGES.

*Butt and Rabbet.*
Stanley R. & L. Co.'s ..20&10&2½%
*Cream Pail*, Fairmont, per doz..$3 75
*Marking, Mortise, etc*.....
.....50&10%@50&10&5%
*Saw*—Atkin's agle. 55c, dbl. 80c pr doz.
*Wire.*
Disston's.....25%
P. S. & W. Co.'s.....20%

GIMLETS.

Discount.....40@40&10%

GLASS—WINDOW.

All sizes, single strength....90-15&5%
" double strength...90-15&5%

GLASSES—LEVEL.

Stanley R. & L. Co.....50&5%

GLUE

*Bulk.*
B Amber .....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per lb 17 c
*Liquid.*
Eagle .....40 %
LePage's—
List "A".....37½%
List "B".....33⅓%
List "C".....25 %

GOODS.

*Bright Wire*..... 80-10&5%

GREASE, AXLE.

*Wood Boxes.*
Diamond.....per gr. $5.00
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
*Wood Pails.*
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 68c each.
*Tin Cans.*
1 lb. Frazer's carriage, pr. doz. $1.30
1½ lb. " wagon . " 1.30
3 lb. " " " 2.40
5 lb. " " " 3.50

GRIDDLES

*Soapstone* .....40&5%

GRINDSTONES

*Family*—In..... 7 8 9
Per doz .....$8 25 9 50 11 00
*Loose.*
Per ton .....$20 00@$21 00
*Mounted—*
Ball Bearing..... 1 2 3
Each .....$3 10 2 90 2 75
Common Bearing.. 1 2 3
Each .....$2 85 2 65 2 50
*Schofield's—*
Auto.....each, $3 30
Bitreadle..... " 3 10

HAFTS—AWL

*Brad*—Common.....per doz., $0.18
*Peg—*
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
*Sewing—*
Common..... " 21
Patent..... " 52

HALTERS

Jute Rope.....per doz., $0 80
Sisal Rope..... " 1 95
Web ..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

*Blacksmiths' Hand*
Maydole's .....40&10%
Plumb's .....50&10&5%
*Engineers'—*
Maydole's .....40&10%
Plumb's Oil Finish.....60%
" Polished .....50%10&5%
*Farriers'.*
Maydole's .....35&5%
Plumb's .....40&5%
*Machinists'.*
Maydole's .....40&10%
Plumb's. .....50&10&5%
*Nail.*
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast..... per doz $1 10@$1 50
Maydole's .....30&7½%
Plumb's.....40&5%
Vulcan .....35&5%
*Riveting.*
Maydole's.....35&5%
Plumb's .....40&5%
*Shoe.* Plumb's.....30&5%
Cast.....per doz 75c
*Tack.*
All Iron .....per doz $0 35
Pol'd Iron, Hickory hdl " 0 53
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.

*Heavy Hammers and Sledges.*
Under 5 lbs.....70&10%
5 lbs. and over .....75%
*Masons'*—Single & Double Face..75%
*Auger.* HANDLES.
Common Ass'd.....per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
*Axe*.....40%
*Chisel.*
Hickory, Tanged Firmer, Assorted, 24c; Large, 26c per doz.
Hickory, Socket Firmer, Assorted, 18c: Large, 21c per doz.
Applewood, Tanged Firmer. Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted .....per doz 24c
*Coal Pick* .....40%
*Drifting Pick*.....40%
*File*, assorted 13c. large 16c per doz.
*Hammer.*
Adze Eye.....per doz 42c
Blacksmiths'.....per doz 45c@65c
Machinists'..... " 39c@58c
*Hatchet*.....per doz 42c
*Hay and Manure Fork*.....40&5%
*Hoe and Rake* .....40&5%
*Saw*, Plain 72c, Varnished 68c per dz.
*Screw Driver*, Assorted 42c, Large 48c per doz.
*Shovel and Spade* .....40&5%

HANGERS

*Barn Door—*
King .....per doz. prs., 5 00
Monarch .....60&10%
"Never Jump" Hinge.....50&10%
Peerless, Loose Axle.... ..60&10%
Perfection, Roller Bearing..70&5%
Phœnix, Roller Bearing... 70&5%
Prouty .....per doz. prs., $5 50
Rival..... " " 3 90
Superb ..... " " 6 25
Safety Flexible " " 7 50
Wagner's Adjustable.....70@10%
Warehouse .....60%
*Parlor Door—*
Acme.....per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard..... " 3 50
" New Model.... " 2 80
Prouty..... " 3 00
Lundy.....50&10%
*Eave Trough—*
Baker's.....per gr., $2 60
Imperial .....10%
Wire .....25%

HASPS.

Hinge, Wrought.....50, 25, 10, 10&5%
With Staples—See Staples.

HATCHETS.

Ajax .....40&10&5%
Blood's.....40&10%
Cast Claw.....per doz $1 50@$1 75
Cast Shingling.... " ..... 1 20
Duffy's Barrel.....per doz 17 50
Germantown .....35&5%
Hammond's.....40%
Plumb's .....40&10&5%
Plumb's Warehouse.....40%
Roger's Ideal.....per doz $5 25
Underhill's Star Lath.....40%
S. A.....30&10%

HAY RACK BRACKETS.

Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

HINGES.

*Blind.*
Clark's Gravity, per doz sets....80c
Parker's..... .....65%
Shepherd's Noiseless, for Wood casing.... .....doz. $1 05
*Gate.*
Clark's, 1 2 3
Hgs & Ltchs, dz.. $2 35 $2 60 $3 60
Hinges Only, " .. 1 70 1 90
Latches Only, " .. 0 70 0 75
Knuckle.....per doz prs $6 00
Leed's..... " sets 6 75
Superior ..... " prs 9 25
*Spring.*
American.....25%
Bommer Bros. Ball B'rng Floor 40%
Bommer Bros. Spring Hinges .40%
Chicago.....25&5%
Clover Leaf.....per gro $9
Columbia Dbl. Acting....40&10&5%
Gem .....25%
Ideal Detachable,.....per gro $12 00
New Idea ..... " 9 60
Oxford.....20%
*Wrought Iron.*
Light Strap Hinges..70-25-10-10&5%
Heavy Strap Hinges.....
.....75-10-25-10-10&5%
Light T Hinges....60½-25-10-10-&5%
Heavy T Hinges....60-5-25-10-10&5%
Extra Heavy T Hinges.....
.....75-25-10-10&5%
Cor. Heavy Strap..75-10-25-10-10&5%
Cor. Ex. Heavy T....75-25-10-10&5%
*Screw Hook and Strap.*
6 to 12in.....per 100 lbs. $4.00
14 to 20in ..... " " 3.75
22 to 36in ..... " 3.50
*Screw Hook and Eye.*
¾ to 1in .....per 100 lbs. $6.50
⅝in ..... " " 8.00
½in ..... " 10.00

HOES.

Garden.....75&10&5%
*Grub:*
Ajax .....50&10&5%
Extra.....60&10%
Hazel.....per doz $6 25
Ladies' and Boys'.....70. 10, 5, 10&5%
Mortar.....75, 7½, 10&5%
Planter's Eye.....60&10&2½%
Weed .....70, 10, 10&5½%

HOOKS.

*And Eyes.*
Brass .....50&10&5%
Iron..... .....65&10%
*Awning*..... .....per gro $1 50
*Belt*.....75&5%
*Bench*—See Stops, Bench.
*Box*, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
*Bush.*
Common Axe Handle
.....per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
*Chain*—In. ¼&5-16 ⅜ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
*Clothes Line.*
Japanned.....per doz 21c@22c
Galvanized..... " 35c
*Coat and Hat.*
Cast Iron.....per gro 72c@$1 00
Gem Wire.....65%
*Conductor.*
Malleable.....50&10%@50&10&5%
Wrought.....40&10%@50%
*Corn.*
Common, unpolished, per doz. $1 30
" polished... " 1 70
"Cut Easy," .....per doz. 2 65
Clyde's, ..... " 2 40
Brooke's..... " 2 65
*Gate.*—See Goods, Bright Wire.
*Grass.*
Common, Nos. 2 3 4
Per doz..... $1 70 $1 75 —
German .....per doz $1 90
Little Giant..... " 3 10
Wood's..... ... " 1 30
*Hammock.*
Common..... " 21c
With Plate..... " 36c
With Screw..... " 36c
Piggot's..... " $1 05
*Lambreguin* or Drapery...per gro 21c
*Picture* .....50%@50&10%
*Potato and Manure*.....70&10&7½%
*Screw*, Brass.....80&20%
*Seat Spring* .....per lb 6½c

HOOPS—TUB.

Ever Ready..... per case $1 65

HOSE—GARDEN.

Ply 3 4 5 6 8
*Black*, pr ft. 7½c 8½c 9¾c 10¾c 12½c
*Cotton*, 3 ply.....per ft 6¾c
*Red*, 3 ply ..... " 7¾c

HUSKERS.

*Boss.*
Nos. E A B P PX
Dz. $1 85 $2 00 $1 95 Gr. $5 90 $5 20
Nos. 2000 3000 4000 O OX
Gr. $3 10 $6 75 Dz. $1 15 $2 20 $1 65
*Brinkerhoff's* .....per gro 14 50
*Harrington*..... ....per gro 4 20
*Ideal*—Nos. 102 101 100
Per doz..... $1 35 $2 50 $2 75
*Johnson's* .... .....per gro 7 75

IRON.

See Metals—First column.

IRONS.

*Curling.*
Common .... .....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby ..... " 1 50
Tourist, Folding ..... " 0 90
*Pinking*..... " 0 60
*Plane.*
Wood Bench.....20&5%
Stanley R. & L. Co. (new list)35&5%
*Sad.*
Charcoal.....per doz $11 25
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 76c
No. 55 J, " ... " 73c
No. 50 T, " ... " 79c
No. 55 T, " ... " 76c
No. 50, Howells..... " 77c
No. 55, " ..... " 74c
Tailors' Sad .....per lb 4¼c
" Geese..... " 4¼c
*Tuyere.*
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 2 60

JACKS.

*Locomotive* .....75&5%
*Wagon.*
Meeker's .....per doz $11 25
Miller's No. 2 ..... " 7
Winner..... " 7

KETTLES.

Brass.....20%
Caldron..... 50%
Copper.....per lb 27½c
Maslin..... .....65&10%
Sugar .....50&10&5%

KNIVES.

*Beet Topping.*
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 2 50
*Cooper's Hoop* ... .....15%
*Corn.*
Acorn.....per doz $2 65
Ajax..... " 2 25
Clipper, Light, $1 75; Heavy, $1 90 per doz.
Disston's.....per doz $3 15
Easy ..... " 7 75
Rugged Razor ..... " 2 40
H. S. Earle's ..... " 3 15
*Drawing.*
Standard.....70%
Adjustable .....25%
Barton's Carpenters'.....10&5%
" Folding Handle....35&5%
*Hay.*
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 6 25
Wadsworth's Sp'r Point. " 8 75
*Hedge.*
Ajax, Heavy, $5 75; Ex. Heavy, $7 75 per doz.
*Mincing.*
Common, Single .....per doz 48c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
*Putty.*
Common.....per doz 84c
Goodell's.....per doz $1 30@$1 80
Russell's. ..... " 1 75@ 2 25

KNOBS.

*Base*, 2½-in. Maple, Rubber Tip,
..... .....per gro $1 60
*Door*, Mineral.....per doz 0 80
Porcelain ..... " 0 90
Jet..... " 0 88
*Picture*.....60&10&5%

LADDERS.

*Common Long* .....per ft 8½c@13c
*Extension* .....per ft 10½c
*Step.*
Common..... " 6½c
" With Shelf, add 10c.
I X L.....per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.

*Bull's Eye Police.*
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
*Tubular*, Berger.....40&10&5%

LEADERS—CATTLE.

Nos. 1 2 3
Per doz... $0 70 $0 85 $3 75

LEATHER—LACE.

*Cut* .....50&10%
*Sides*, Ex. Quality.....per sq ft 20c

LEATHERS—PUMP.

Valve and Plunger.....50%

LIFTERS.

*Stove Cover.*
Japanned.....per gro $3 75
Coppered..... " 3 60
Chilkoot..... " 4 75
Devore's..... " 5 50
Zero ..... " 3 90
*Transom*, Payson's.....70&10%

LINES.

*Chalk*, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 22c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz..... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... ..... 23c 26c 33c
Masons', in 100-ft hanks...doz $1 00
*Clothes.*
60-ft Jute .....per doz $0 90
72-ft " ..... " 1 00
60-ft Sisal ..... " 1 50
72-ft " ..... " 2 00
60-ft Cotton..... " 1 25
50-ft Braided Cotton.....90%

LINING—STOVE.

In Bricks.....per crate 42c

MACHINES.

| *Boring* | Without Augers. | With Augers. |
|---|---|---|
| Ajax .....per doz | $5 25 | $6 75 |
| Angular... " | 3 25 | 5 00 |
| Boss ..... " | 4 50 | 5 |
| Upright... " | 3 90 | 4 |

*Leather Riveting.*
Chicago, Pomeroy ....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy ..... " 8 00
*Washing.*
Boss. 1 2 5 3
Per doz.. $57 00 $63 00 $69 00 $60 00
Globe, No. 1.....per doz $51 00
O K Rotary ..... " 58 00
Round Wayne..... " 26 50
U. S. Steel..... " 60 00
Western Square, No. 2, $26 50; No. 3, $28 50 per doz.

MALLETS.

*Carpenters'.*

| | Fibre Head, Per doz. | Small. $5 00 | Med. $5 75 | Large. $6 75 |
|---|---|---|---|---|
| Round Hickory.....per doz | | | | $1 75 |
| " Lignumvitæ.... " | | | | 2 75 |
| Square Hickory..... " | | | | 1 75 |
| " Lignumvitæ .. " | | | | 3 25 |

*Tinners'.*
Applewood ..... " 1 65
Hickory..... " 0 80
Hickory Sheet Iron. "

*Door.* MATS.
National Rigid.....60&5%
Queen Flexible.....50%
*Stove,*
Standrd Quality.....per gross $2 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex.
Heavy.....per doz 1 00

MATTOCKS.
Ajax.....5%&10%
Extra.....60&5%

MAULS.
Iron, lbs. 10 13 16 18 21
Per doz. $3 40 $4 20 $5 00 5 50 $6 00
Wood face, lbs. 10 11 12
Per doz..... $4 75 $5 00 $5 25
*Wood Choppers'.*
Lake Super'r & Oregon Pat.70&10%

MEASURES.
½ pk 1 pk ½ bu
Galvanized..per dz $3 75
Japanned.... " $1 50 2 25 $2 90
Iron Bound. " 1 40 1 70 2 00
*Babbitt.* METAL.
Alm.....per lb 8¾c
Best..... " 23c
Common, No. 4..... " 6½c
Copper Mixed..... " 18½c
Magnolia Metal..... " 19c
Tony..... " 10½c
See Metals—In first column.

MICA.
First Quality.....40, 10&5%
Second Quality..... .....60%

MILLS—COFFEE.
Enterprise.....25&5%
National.....30%
Parker.....50&10%@60%

MOPS.
*Erie*.....per doz $3 15
*Handled Cotton.*
Lbs. ¾ 1 1¼ 2
Per doz.. $1 40 $2 10 $2 25 $2 95

MOWERS—LAWN.
*Ball-Bearing.*
In. 15 17 19 21
Each..... $7 00 $7 60 $8 25 $8 90
*Champion.*
In. 12 14 16 18 20
Ea.. $2 10 $2 15 $2 15 $2 20 $2 35
*Champion, High Chief.*
In. 16 18 20
Each..... $3 40 $3 70 $4 00
*Cheap Grades.*
In. 12 14 16 18
Each..... $1 90 $1 95 $1 95 $2 10
*Clipper*.....50&10&10%
*Girard*, in. 14 16
Each..... $2 60 $2 80
*Philadelphia.*
All Styles Except A & E.....70&5%
Style A.....60&5%
Style E, High Wheel.....70,10&5%
Drevels..... 50%
All Day.....Net Price
*Horse.* MUZZLES.
Nos. 1 2 3 4 5
Doz.$0 30 $0 50 $0 55 $0 70 $1 00
*Horse Shoe.* NAILS.
Ausable.....50%
Capewell.....10%
Perfect.....40&5%
Putnam.....33⅓%
Star.....35%
*Picture.*
Brass Head.....40&10%
Judd's.....40&10%
*Brads*.....80&10&10%
*Wire Nails*—Small lots.....$2.30
Car load lots..... 2.20

NETTING—POULTRY.
Galvanized Before Weaving.80&20
" After Weaving...80&15
Cut Pieces.....65&5%

NIPPERS.
*End Cutting.*
P. S. & W. Co.....40&5%
Stubb's Pattern.....40&10&5%
*Hoof.*
Heller's.....40&5%
P. S. & W. Co.....40&10%
V. & B.....40-5%
*Hose.* NOZZLES.
Genuine Boston.....per doz $3 40
Genuine Gem..... " 3 60
Magic..... " 3 60

NUTS—HOT PRESSED.
*Square Blank.*
In. ¾ ⅝ ½ ⅜ ¼ ⅜ 1
Lb. 7½c 5¼c 4⅞c 4⅝c 4½c 4¼c 4¼c
*Square Tapped.*
In. ¼ ⅜ ½ ⅝ ¾
Lb. 14c 9⅝c 7¼c 6½c 6¼c

OILS.
Linseed, Pure boiled.....per gal 45c
" " raw..... " 44c

OILERS.
Chase Pattern.
Brass and Copper.....50&10%
Zinc.....60&5%
*Engineers'.*
Cannon..... ....4 & 5%
Steel.....60&10&5%
Tin.....per doz $2 25@$2 75
*Machine.*
Ajax.....per doz $0 80
Copper Plated Steel... " 1 50
Malleable Iron.....40&10&5%
Tin.....per doz 55c@65c

OPENERS.
*Box*, in. 10 12 14
Flat ...per doz $2 85 $3 60 $4 15
Round.. " 2 10 2 25 2 [illegible]
*Can.*
American.....per doz $0 26
Delmonico..... " 1 50
Never Slip..... " 0 68
Perfect..... " 1 35

Tip Top..... " 0 84
*Crate*, V. & B..... " 5 75

OUTFITS—COBBLING.
Combination.....per doz $11 50
Economical..... " 4 90
Family..... " 10 00

PADLOCKS.
Standard Wrought.....70&10&5%
Champion.....50%
Eureka.....40&10&5%
Yale.....60&5%
*Cream.* PAILS.
14-qt., Without Ga....per doz $3 00
20-qt., " " .... " 3 50
20-qt., With Gauge.... " 5 00
*Sap*, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
*Stock*, Galvanized.
Quarts. 14 16 18 20
Per doz... $3 75 $4 00 $4 65 $5 25
*Water*, Galvd, qts. 10 12 14
Per doz..... $3 00 $3 30 $3 60
*Wood.*
Cable, 2-Hoop, $1 70; 3-Hoop, $1 90 per doz.
Cedar, 3-Hoop, $2 50 per doz.
Standard, 2-Hoop, $1 55: 3-Hoop, $1 75 per doz.

PANS.
*Dripping*.....50&10&5%
*Fry*, Common.....60&10&5%
Acme.....66⅔&5%
*Roasting.*
Brownie.....Each 30c@37c
L. & H..... " 58c@80c
*Building.* PAPER.
Plain.....per 100 lbs $1 15
Tarred..... " 1 25
Tarred Felt..... " 1 80
Diamond A, Red Rosin.pr roll 0 63
Leader, Red Rosin..... " 0 48
*Sand and Emery.*
Ajax.....50&10%
B. & A.....50 & 5%
*Wrapping.*
Grecian Express.....per lb 3⅜c
Rag..... " 2½c
*Apple.* PARERS.
Bay State.....per doz $13 00
Reading..... " 6 75
Turntable..... " 6 00
White Mountain..... " 5 25
*Potato.*
Goodsell's Saratoga..per doz. $6 50
White Mountain..... " 6 00

PICKS
Adze Eye Ore.....60&5%
Drifting and Poll Picks.....60&10%
Ajax Railroad.....50&5%
Extra Railroad.....60&10%
Surface.....60&10%

PINCHERS.
Carpenters', wrt. iron, pol. steel jaws.....30%
Blacksmiths'.....50%
P. S. & W.....40&10&5%
*Clothes.* PINS.
Common.....per gr..$0 12
Hoyt's..... " .. 30
U. S..... " .. 70
*Picket.*
Fluted.....per doz..$0 90
Round..... " .. 1 75
Spiral..... " .. 1 90

PIPE.
*Conductor.* Nested Not nested
Eastern.....70&12½% 70&7½%
Central.....70&7½% 70%
Southwst'n.. 65-&7½% 65&2½%
Mo. River....70&7½% 70%
Southern.....65&10% 65&5%
*Lead.*
Full coils.....per lb..$0 6½
Cut " ..... " .. 6¾
*Stove.*
Acme—In. 5 6 7
Smooth, per jt. 10½c 10½c 12½c
Planished, " ..32c 33c 43 c
Peerless--Smooth..8½c 9c 11½c
Polished. 16c 18c 22 c
Planished 28c 31c 40 c
Made-up—In. 5 6 7
Smooth..... 8¾c 9c 12 c
7 to 6 in. Smooth Tapers, pr jt..14c
6 in, Smooth T's..... " ..30c
7 to 6 in. Planished Tapers.....45c
*Wrought Iron Gas Pipe.*
⅜-in., black.....discount, 60%
½ " ..... ..... " 63%
¾-in. to 4-in , black..... " 69%
4½ " 6 " .... " 66%
7 " 12 " .... " 64%
¾ " galvanized " 48%
½ " " " 50%
¾ " to 4 " " 56%
4½ " " 6 " " 52½%
7 " " 12 " " 50%

PLANES.
Ohio.....60&5%
Stanley Planes, new list..30%@30&5%
Bailey Planes.....35%
Sandusky.....20%
*Corn,* PLANTERS.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
*Potato*
Acme.....per doz.. $6 25
Challenge..... " .. 10 75
*Fencing.*
Cronk's.....per doz..$9 25
Farmers' Choice..... " .. 8 75
Russell's..... " .. 8 65
*Flat and Round Nose.*
Bernard's.....30%
German.....50%
Lodi.....40%
Paragon.....40&10%
P. S. & W. Co.....60%
*Gas*--In. 8 10 12
Per doz.....$3.10 $4.00 $4.90

PLUMBS AND LEVELS.
Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....30%
Davis' Inclinometer.....20%
*Stanley's*
Nos. 00S 0S 2S 3S
Per doz..$4.50 $5.20 $7.60 $8.65
Nos. 30 25 50 35
Per doz.$13.00 $17.50 $17.50 $12.35

POINTS. Discount
Drive Well Points.....80&10&5%

POKERS--STOVE.
Wr't Iron, str't or bent, per doz.$0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td. coil hdl's.. " 70

POKES--ANIMAL.
American.....per doz.....$2 60
Brown's wr't steel " ..$5 25@6 25
Eagle..... " .....$4 25
Success..... " ..... 2 60

POLES--FISHING.
*Bamboo.*
Ft. 12 14 16 18 20
Pr 100..$2.75 $3.40 $4.75 $6.00 $7.75

POLISH.
*Metal.*
Pride of the Bar..... " .. 1 60
Putz Cream.
Pts. 1-6 ¼ ½
Per doz.....$0.84 $1.35 $1.80
Pts. 1 2 4 8
Per doz.$3.60 $6.00 $9.00 $18.00
White Silk, half pints, per doz.$2 00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine
Pts. 1-6 ½ 1 2
Per doz...$0.68 $1.30 $2.15 $3.00
*Shoe.*
M. D. C.....per doz..36c@50c
F. C. O..... " .....40c
T. M..... " 50c@$1 25
Imperial.....per gr.....$5 00
*Stove.*
Black Eagle, 1 lb cans, pr gr..$15 00
Black Silk—
5 lb. pail..... 70c
Paste, 5 oz. cans per doz.....$1.00
Paste, ½ lb cans, per doz... 1.00
Liquid, ½ pint cans per doz. 1.00
Liquid, 6 oz. cans per doz.... 75c
Steel Range Gloss per doz... 1.75
Blackene, 1 lb cans....pr gr.. 13 00
Black Jack, ¾ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate..... " .. 4 50
Rising Sun..... " .. 6 00

POPPERS, CORN.
Round or Square, 1 qt.per doz., 85@95c
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 30
1 qt. reversible.....per doz., 1 60

POTS—FIRE.
Bernz.....each..$3 85
Clayton & Lambert's,each,$4 75@6 25
Gate City.....each.. 6 25
Gem..... " .. 6 75

POWDER.
See Ammunition.

PRESSES—FRUIT AND JELLY.
Enterprise Manufacturing Co... 25%
Henis.....per doz. $2 10

PRUNERS.
Disston's Pole.....per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 70, 10&5%

PULLERS.
*Cork.*
Modern.....each..$2 60
Quick and Easy..... " .. 3 90
*Nail.*
Giant.....per doz..$9 00@10 50
Giant Pattern. " .. 6 00
*Tack*--Giant.... " .. 60

PULLEYS.
*Awning*--Jap'd.....40&5% to 35&5%
*Clothes Line*.....20&10%
*Hay Fork.*
Iron Wheel, 5 in.....per doz..$1 70
Wood Wheel, 6 in... " .. 1 60
Wood Wheel, 6 in... pass knot..... " .. 1 75
*Hot House*--Jap'd.....30&5%
*Screw*..... " .....30&5%
*Side*..... " .....30&5%
*Sash.*
Chicago.....per doz..$0 29
Clark's..... " .. 43
Common Sense, 2 in.. " .. 27
" Pattern, 2 in.. " .. 22
Empire..... " .. 24
Ideal..... " .. 24
Ottumwa. ball b'ring " .. 34
Grand Rapids, No. 17 " .. 24
" " No. 11 " .. 25

PUMPS
*Pitcher Spout.*
Nos. 1 2 3 4
Each.....$0.98 $1.10 $1.20 $1.45
*Spray.*
Blizzard.....per doz..$14 25
Cyclone, tin..... " .. 3 90
" copper..... " .. 6 75
Daisy..... " .. 8 75
Little Giant.....each.. 2 40

PUNCHES.
*Conductors'*, No. 22....per doz..$2 50
*Machine*.....per lb . 19
*Saddlers'.*
Common.....per doz..60c@70c
Good..... " ..72c@84c
*Spring.*
1 Tube.....per doz $2 25

PLATES--TIN.
See Metals in Column 1.

PLIERS.
*Button's*--In. 4½ 6 8 10
Per doz.....$2.60 $3.10 $3.90 $5.30
*Button's Pattern.*
In. 4½ 6 8 10
Per doz.....$2.35 $2.50 $3.45 $4.40
*Cutting.*
Cronk's Comb.....per doz..$6 25
Bernard's..... 30%
Lodi.....40&10&5%
Stubb's.....50%
4 Tube, revolving.... " .. 5 25
*Tinners'.*
Hollow.....40%
Solid.....each..5½c

PUTTY.
*In Bladders.*
Strictly pure.....per 100 lbs. $2 35
Commercial..... " " 2 10

RAIL.
*Barn Door.*
Light Wrought.. .....per ft. 3c
Safety..... " 5½c
Single Flange..... " 1⅞c
Smith's Wro't Bracket—plain 3½c
Smith's Special..... .....4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel.....30%
Smith's Milled Steel.....4½c
*Sliding Door.*
Painted iron.....per ft. 4½c
Bronzed wr't iron..... " 8½c

RAKES.
*Coal* or Road.....per doz. $5.25
*Garden.*
Steel, braced.....70&10&5%
Steel, bow.....70,5,10&5%
Malleable iron, heavy.....70@10%
*Hay*—Wood.....per doz. $1 05@1 70
*Lawn*—Wood.
Common.....per doz. $2
Automatic..... " 6 00
New Lawn Queen.... " 3 60
Jumbo, 36 teeth..... " 5 75

RASPS—See Files.

REGISTERS.
List Sept. 1, 1901.
White Japanned.....75&10%
Nickle Plated.....75&10%
Copper.....75&10%
Electro Plated Brass.....50%

RINGS
*and Ringers*—Hog.
Blair's Rings.....per doz. 60c
Blair's Ringers..... " 84c
Brown's Rings..... " 65c
Brown's Ringers..... " 90c
Champion Rings..... " $2 35
Champion Ringers..... " 1 70
Hill's Rings..... " 48c
Hill's Ringers..... "70c@95c
Mazor Rings..... " 80c
Mazor Ringers..... " $1 15
Perfect Rings..... " 84c
Perfect Ringers..... " $1 05
Wolverine Rings..... " 1 50
Wolverine Ringers.... " 70c
*Bull.*
Copper, 2½-in. 3-in.
per doz..... $1 35 $1 70
Steel.....per doz. 95 1 05
Steel, Nickel Pl't'd, 2½-in., doz. 1 35
Rea's Self Piercing.. .....$1.95
*Fruit Jar*—White.....per lb. 30c
*Key.*
Split, round.....per doz. 1
Split, square..... " 32c
Ball, round..... " 32c

RIVETS.
*and Burrs.*
Copper Belt.....50&10&5%
Coppered Iron.....75%
Tinners'.....75%
*Hame*.....per lb.
*Slotted Clinch*.....per doz. 70c@75c
*Tubular*—Nos. 1 and 2, assorted sizes.....per doz. 60c

ROPE.
Per lb.
*Manila*, 7-16 inch diameter and larger.....11½c "
*Sisal*, 7-16 in. and larger.. 9½c "
*Cotton.*
¼ and 5-16-in. on reels...per lb. 12c
¼ and 5-16-in. in coils... " 12½

RULES.
Boxwood.....60%
Ivory.....35&5%

SASH WEIGHTS.
Per ton, f.o.b. Chicago.....$30.00

SAWS.
*Back.*
Disston's.....25&7½%
Jackson's.....25&7½%
*Butchers'*—Disston's.....25&7½%
*Circular.*
Disston's.....50%
Hiles'.....50%
*Compass.*
Common.....per doz. $1 35@1 60
Disston's.....25&7½%
*Cross-Cut.*
Atkin's.....40%
Disston's.....40&10% &50%
Pocahontas per ft. 29c
Pocahontas, Blued..... " 41c
*Dehorning.*
Atkins'.....per doz. $5 50
Disston's..... " 5 75
*Hack.*
Disston's.....25½%
Keystone.....33⅓%

SAWS—CONTINUED.

*Hand and Rip.*
Brown's .....30&7½¢
Disston's No. 7.....30&7½¢
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½¢
Gorham's Comb.....30&7½¢
Keystone.....30&7½¢
Sam Sickles', hand..per doz. $4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75
"U. S. A." hand..... " 12 25
"U. S. A.' rip..... " 14 25
*Keyhole*—Disston's .....25&7½¢
*One Man* .....50¢
*Panel.*
Brown's .....30&7½¢
Disston's No. 7.....30&7½¢
Disston's Nos. D8 and 12, D100 and 112.....25&7½¢
"I Will" .....40¢
"U. S. A." .....40&10&5¢
*Pruning.*
Avery's Duplex .....25&7½¢
Brown's .....25&7½¢
Disston's.....25&7½¢
*Wood.*
Common.....per doz. $4 50
Handy ..... " 7 50
Happy Medium ..... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever.....per doz. $ 1.20
Stillman's Lever.....per doz. 1.30
Leach's.....per doz. 5.00
Nash's.....per doz. 4.20
Monarch.....per doz. 6.50
Aikin's Pattern.....per doz. 3.50

FRAMES—SAW.

Common, plain.....per doz. $1 20
" painted..... " 1 60

SCALES.

*Counter.*
Fairbank's Standard.....40¢
Hatch's.....per doz. $21 50
Little Detective, 1 2 6
Each .....$1 65 1 85 1 80
No. 1 Tea .....per doz. 7 75
Union Platform.....each 2 35
Pelouze .....25¢
Turnbull's Market.....50¢
*Platform.*
Common, 600 800 1000
Each ..... $8 75 9 75 10 75
Chicago Standard.....33⅓¢&40¢
Fairbank's Standard.....40¢

SCOOPS.

*Ames*.....10&10¢
*Eastern Pattern.* Socket Strap.
Nos. 2 3 4 5 6
Per doz. $7.00 7.25 7.50 7.75 8.00
Nos. 7 8 9 10 12
Per doz. $8.25 8.50 8.75 9.00 9.50
*Western Pattern.* Socket Strap.
Nos. 1 2 3 4 5
Per doz. $7.00 7.25 7.50 7.75 8.00
Ajax *Eastern Pattern,*
Nos. 2 3 4 5
Per doz. $5.25 5.50 5.75 6.00
Nos. 6 7 8 9
Per doz. $6.25 6.50 6.75 7.00
Ajax. *Eastern Pattern,* extra heavy,
Nos. 3 5 6 7
Per doz. $7.25 7.75 8.00 8.25
Ajax. *Western Pattern,*
Nos. 4 5 6 7
Per doz. $5.75 6.00 6.25 6.50
Nos. 8 9 10 12
Per doz. $6.75 7.00 7.25 7.75

SCRAPERS.

*Boz.*
Stanley's Adjustable, per doz. $3 60
Triangular..... " 2 10
*Cabinet.*
Ajax .....per doz. $2 25
Cast Steel ..... " 65c@75c
Stanley's No. 80..... " $7 75
*Road.*
Cubic ft. 7 5 3
Without runners, ea. $5.00 4.75 4.50
With runners.... " 5.25 5.00 4.75

SCREWS.

*Bench.*
Iron.....30¢
Wood, white maple ..per doz..$3 60
*Hand*--Wood.....20¢
*Hand Rail*.....70&10¢
*Jack*.....75&5¢
*Lag or Coach*, Gimlet Point..70&10¢
*Saw*—Centennial.
Nos. 1 2 3 4
Per doz..... 22c 25c 32c 36c
*Wood.*
F. H. Bright Steel.....87½&10¢
R. H. Blued Steel.....85&5¢
F. H Jap'd Steel.....82½&5¢
F. H. Brass .....85&5¢
R. H. Brass .....80&5¢
R. H. Nickel Plated.....75¢

SCYTHES.

Clipper, grain.....per doz..$9 25
Dutchman, grass ..... " .. 6 00
Golden Clipper, grass. " .. 5 50
U. S. A., grass..... " .. 7 00

SETS.

*Nail.*
Round, common.....per doz..$0 33
Square " ..... " .. 42
Octagon " ..... " .. 33
Square, Buck Bros... " .. 1 25
Cup Point, knurled, pr doz. 70c@90c
*Rivet.*
Farmers'.....per doz..$1 45
Tinners'.....50&10¢
*Saw.*
Aiken's Pattern.....per doz..$3 50
Common Lever. ..... " .. 1 20
Disston's Monarch... " .. 6 50
" X Cut..... " ..11 75
German..... " .. 1 35
Morrill's Old Style... " .. 5 00
" Pattern.... " .. 4 50
Leach's..... " .. 4 80
Nash's Hand..... " .. 4 00
" X Cut..... " .. 5 50
Stillman's Lever..... " .. 1 30
" X Cut.... . 2 50

SHARPENERS--SKATE.

Diamond..... per doz..$1 60

SHAVES--SPOKE.

Iron.....per doz..$1 35@$2 75
Wood..... " .. 2 75@ 4 75
Bailey's.....50&5¢
Goodell's.....15¢
Stanley's Universal.....30&5¢

SHEARS.

*Pruning.*
Buckeye, No. 1.....per doz..$6 50
" No. 2..... " .. 8 50
California Pat., 9 in.. " .. 4 25
" 10 in.. " .. 5 00
Draw Cut, No. 3..... " ..15 50
" No. 4..... " ..18 50
Henry's Pat. 0 01 14 012
Per doz...$1.90 $2.50 $3.15 $3.50
Star.....per doz..$4 75
*Sheep*--No. BBA.
6 in. 6½ in. 7 in.
Reg.Grip..$11.00 $11.35 $12.00 doz.
Nar.Grip.. 11.20 11.00 12.15
*Tinners'*--See Snips.

SHEAVES—SLIDING DOOR.

In. 3 4 5
*Common*..Per set...$0.42 $0.48 $0.70
*Hatfield's*. " .. .75 1.00 1.60

SHELLERS--CORN.

Union .....per doz..$7 25

SHOT--See Ammunition.

SHOVELS AND SPADES.

*Railroad, Etc.*
Gold Hibbard's.....per doz.. $9 25
C. H. Conovers's.... " .. 7 75
Beckwith's..... " .. 7 75
Hickory..... " .. 6 25
Greenleaf's ..... " .. 5 75
Columbus..... " .. 5 00
Ames' new list .....Discount 12½¢
*Coal.*
No. 2 Ajax.....per doz..$5 25
No. 4 Golds..... " .. 6 25
Ames' new list.....Discount 12½¢

SIEVES.

Champion.....per doz. $1.00
Hunter's Genuine..... " 1.20
" Imitation..... " 1.00
Tin Rim, 16 mesh plain wire" 1.35
Wood " 16 mesh plain wire" 1.00

SINKS.

*Cast Iron.*
Painted.....50¢
Enameled, White .... .....60&10¢
*Wrought Steel.*
Painted, new list.....40-10&5¢

SLEDGES--See Hammers.

SNAPS—HARNESS.

Champion.....65¢
German Pattern.....30&5¢
Judd's Pattern .....60&10¢@70¢

SNATHS.

Double Ring, Bush....per doz..$6 50
Patent Loop " .... " .. 7 00
" " Brass.... " .. 6 25

SNIPS--TINNERS'.

Hernisch's.....40&5¢
National..... 40&5¢
P. S. & W. Co.'s.....25&5¢

SOLDER.

See Metals, Column 1

SPRINGS--DOOR.

*Perfect.* Nos. 1 2 3 4
Per doz..... 32c 38c 45c 48c
*Reliance*, Light $1.40, Heavy $2.20 doz.
*Star*..... " .90, " 1.30 "
Torrey's.....per doz..$1 35
Warner's— No. 1 No. 2
Per doz..... 72c $1 45

SQUARES

*Steel and Iron* .....70¢
(Add for Bluing, $2.50 per doz., net.)
*Mitre*--Stanley's No. 12 .....40¢
*Try.*
Stanley's No. 20, new list...30&10¢
" Nos. 12 and 14.....40¢
*Try and Bevel*--Stanley's.....40&5¢
*Try and Miter.*
Fox's.....per doz..$7 25
Winterbottom's .....50¢

SQUEEZERS--LEMON.

Common Wood.....per doz..$0 72
Porcelain Lined, wood. " .. 1 30
Boss, tinned iron ..... " .. 84
Pearl, nickel plated... " .. 1 30
Star " " ..... " .. 1 60
Little Giant, tin'd iron " .. 4 25
King..... " .. 2 50
Drum ..... " .. 4 50

STAPLES.

*Blind*—Barbed .....per lb. 9½@10c
*Butter Tub*..... " 8@8½c
*Fence*, less than carload.
Polished .....per 100 lb. $2 40
Galvanized ..... " 2 80
*Netting*—Galvanized.....per keg 3 60
*Wrought.*
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples..... 85-10&5¢
Extra heavy .....75&10¢

STEELYARDS.

Discount 25¢

STONES.

*Axe.*
Hindostan .....per lb. 5¾@7c
More Grit..... ..... " 9¼c
Washita ..... " 16½c
*Emery* .....60¢@60&5¢
*Oil*—Unmounted.
Arkansas Hard .....per lb. $2 00
Arkansas Soft ..... " 1 15
Hindostan ..... " 6¼@6¾
Lily White..... per lb 43c
Queer Creek..... " 14¼c
Ouachita..... " 36c
Washita..... " 25c
*Sythe.*
Black Diamond .....per gro. $7 75
Clear Grit ..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 20
La Moille..... " 7 00
Pikes Gen. No. 1, Ind. Pond., per gro ..... 4 75
White Mountain.....per gro. 6 50
Willoughby Lake .... " 6 25
Red End ..... " 3 15

STOPS—BENCH.

Hotchkiss'.....per doz. $3 60

STOPPERS—FLUE.

Common .....per doz. 42c
Crown..... " 48c
Gem, flat, painted..... " 72c
Gem, cor'd, decorated.... " 68c
Kirch's ..... " $1 20
Peerless ..... " 72c
Skinner's Common Sense " 95c

STRAPS.

*Scoop* .....per doz. prs. $1 80
*Skate*..... " " 60@70c

STRETCHERS.

*Carpet.*
Bullard's .....per doz. $3 90
Excelsior ..... " 5 50
Malleable Iron..... " 70
Perfection ..... " 6 00
King ..... " 4 50
*Wire.*
N. S. Elwood's .....per doz. $5 75
O. S. Elwood's..... " 5 75
Little Giant ..... " 5 50
Star Lever..... " 6 25
Star Tackle Block.... " 9 25
Warner's ..... " 6 25

SWIVELS.

Malleable Iron .....per lb. 6½c
Wrought Steel.....per gro. $4 50

TACKS.

American Cut.....90&5¢
American Wire.....85&25&10¢
Bill Posters Cut ..... .....90&40¢
Blued Carpet.....90&15¢
Tinned Carpet.....90&15¢
Gimp .....90&30&10¢
Upholsters' Cut .....9 &40&5¢
Upholsters' Wire .....90&25¢
Double Pointed .....90&20¢
Copper .....per lb. 27c
Canvas Nails.....75&5¢
Clout Nails.....75&10&5¢
Hungarian Nails.....80&5¢

TAPES--MEASURING.

Asses' Skin .....40&10¢
Bend Leather.....25¢
Patent Leather.....25¢
Lufkin's Steel.....30¢
Lufkins Metallic .....30¢

TENTS AND PAULINS.

Wall Tents .....50&20&10¢
Wedge Tents .....50&10&5
Paulins .....50&10&5¢
Wagon Covers.....50&10&5¢

THERMOMETERS.

Tin Case.....per doz.. 95c@$1 25
Wood Back..... " $1 75@ 9 00
Glass ..... " 15 50

TIES.

*Bale.*
Single Loop .....80&10&5¢
All other kinds.....70¢
*Cow*--See "Chains."

TONGS.

*Crimping*—Packham's...per pair 50c
*Gutter*—P. S. & W. Co.'s. ....15&10¢
*Pipe*—Brown's ..... .....50¢
*Roofing*—P. S. & W. Co.'s ....15&10¢

TOOLS—SAW.

Atkin's Dexter.....per doz. $4 25
Atkin's Excelsior..... " 6 25
Disston's Universal .....40¢
McDonald's.....33⅓¢
Simond's Crescent.....per doz. $10.00

TRAPS.

*Game.*
Hawley & Norton.....70¢
Newhouse. .....50¢
New Victor .....80¢
*Mole*—Reddicks .....per doz. $5 75
*Mouse and Rat.*
Wood Choker.....per hole 10c
Tin Choker ..... " 11c
Delusion.....per doz. 85c
Imitation Sight, Rat .. " 80c
Marty Rat..... " $6 75
Marty Rat, Imitation.. " 3 75
Marty Mouse..... " 3 15
Marty Mouse, Imitation " 2 10
E-Z-Ketch, Mouse..... " 42c
E-Z-Ketch, Rat ..... " 90c
French Automatic..... each $3 60
*Fly.*
Balloon.....per doz. $1 25
Harper's..... " 1 35

TROUGH--EAVE.

Eastern..... Discount 75&16⅔¢
Central. .... ..... " 75&12½¢
South Western.... " 75¢
Missouri River.... " 75&12½¢
Southern ..... " 75&12½¢

TROWELS.

*Brick.*
Standard.....30¢
Brade's.....10&7½¢
Disston's.....30¢
Rose's.....25¢
*Plasterers'.*
Standard .....33⅓¢
Disston's.....30¢
W. & McP.....25¢

TRUCKS.

Bags.....each $1 70
Handy..... " 1 50
Warehouse.....60&5¢

No. 1 2 3
Half Ironed.....$2.60 $3.40 $5.00
Full Ironed..... 3.90 5.75 6.75

TUBS-WASH. Ex.

No. 3 2 1 large
*Standard*, per doz. $5.25 6.25 7.25 9.75
*Dowel* .... " 5.60 6.60 7.50 10.00
*Cedar* .... " 6.50 7.50 8.25
*Indurated.* " 7.20 7.95 9.45 11.70
*Galvanized.*
No. 1 2 3
Per doz .....$5.75 6.25 7.00

VISES.

Bonney's.....30¢
Cheney's .....20¢
Parker's Oval Slide.....50@50&10¢
Parker's Parallel.....15@20¢
Parker's Victor.....10¢
Parker's Combination.....50&10¢
Solid Box.....50&5¢
Adam's Mechanics'.....each $2 50

WARE,

*Cast-Iron Hollow.*
Ground ..... 40, 10&2½¢
Unground .....50, 10&2½¢
Extra Finished.....40¢
White Enameled.....40&5¢
Muslin Kettles.....65¢
*Enameled.*
Adamant, one coat, 70&10¢@75&10¢
The manufacturers divide this ware into two classes, which take different discounts, noted above.
Chrysolite, three coat.....40&5¢

WASHERS.

*Leather.* In. ¾ 1 1½ 1¾ 1½
Nut, per C.....16c 17c 19c 25c 23c
Collar, per C...35c 40c 40c 48c
*Wrought Iron.*
In. ¼ 5-16 ⅜ ½ ⅝ ¾ to 1
Per lb...9c 8c 6⅞c 5¼c 5c 4¾c
*Wrought Steel.*
In. ¼ 5-16 ⅜ ½ ⅝ ¾ to 1
Per lb .10c 9c 7⅞c 6¼c 6c 5¾c

WEDGES.

*Ax*.....per doz....30c
*Galling* .....per lb. 10¾c
*Saw*..... " .. 8¾c
*Wood Choppers.*
Lake Superior and Oregon, Pat .....per lb.. 9¾c
Reg. Pattern, Steel... " .. 4 c
Truckee " ... " .. 4¼c

WEIGHTS.

*Hitching*.....per lb 2⅜c
*Sash*--F.O.B. Chicago..pr ton..$28.00

WHEEL BARROWS.

Common Railroad....per doz..$13 00
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray.. " .. 26 50
No. 04 Steel Dirt ... " .. 52 00
No. 04½ " " ... " .. 56 00

WHEELS.

*Corundum*.....70&10&5
*Emery*.....75&5¢
*Well.* In. 8 10 12 14
Per doz.... $1.90 $2.20 $3.00 $5.50

WIRE.

*Barbed.* Painted. Galv'd.
Carloads...pr 100 lbs..$2.50 $2.80
Less than car " .. 2.60 2.90
*Brass.*
In coils..... 20¢
In 1 lb. spools, new list.....50&10¢
*Broom*--Tinned.... ....60&10&10&10¢
*Cable*—Same price as Barbed Wire.
*Copper.*
In coils.....20&10¢ 33⅓¢
In 1 lb. spools, new list.....50&10¢
*Fence*--Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.10
Nos. 6 to 9, Galv'd... " 2.20
*Hair*--New list.....50&10¢
*Market.*
Bright, full bdles.....70&10¢
Bright, broken bdles..... 70¢
Coppered, full bdles.....70¢
Coppered, broken bdles ....65&10¢
Tinned, full bdles..... .....70&5¢
Tinned, broken bdles.....65&10¢
*Picture.*
In coils.....80¢@80&10¢
In 5 lb. spools .....per lb 26c
*Plain*—Small lots.....$2.00
Car lots..... ... 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard.....60¢
Alligator.....65&5¢
Always Ready.....40&10&5¢
Bemis & Call.....40¢
Coe's Standard..... .40&10¢
Girard's Agricultural.....75¢
P. S. & W. Co.'s Agricultural....75¢
" " Knife H'dle..50&5¢
Wescott's "S".....33⅓¢
Malleable.....per lb. 6¼c
Stillson Pipe.....60&5¢
Trimo " .....60¢

WRINGERS.

*Clothes.*
Nos. 22&110, Guarantee, pr doz. $28 00
No. 150, Sunshine ..... " 18 00
No. 130, Mendota..... " 18 00
No. 12, Success..... " 16 00
Blue Bell, Ball Bear'g. " 25 00
No. D 110, Domestic... " 22 50
No. E 300, Empress ... " 25 50
No. 122, Bicycle Ball-bearing..... " 27 50
No. 122, Swan..... 27 50

# Wants and Sales.

**For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.**

## BUSINESS CHANCES.

**PATENTS** HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—Stock of hardware, implements, tinware, etc., and frame store building in good farming community. Stock and fixtures inventory $1,050. Building worth $600. $1,350 cash takes the outfit. Reason for selling, wish to engage in other business. Address Box 32, Lemon Lake, Mich. 19

For Sale—Good, clean stock of hardware, stoves and sporting goods; tinshop in connection. Will invoice about $6,000. Business transactions in one year, from $17,000 to $18,000. Situated in an Iowa town of 6,000 people on the Mississippi river. Good reason given for selling. A snap for the right man. Address "Letter W," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 19

For Sale—A well established hardware business with tin shop and good set of tinners' tools. Stock invoice about $1,500; also building and lot for sale; building 24x60; lot 50x140; location, 37 miles west of Fargo on N. P. main line. A good chance for a live tinner not afraid of work. No shop nearer than 18 miles. I am in my 60th year and have suffered the loss of a limb and want to discontinue business. For further particulars address W. W. Merrill, Buffalo, N. D., Box 245. 19

For Sale—My hardware, stoves, tinware and tin shop and pump work and cornice work; up-to-date stock; invoices about $6,000 to $7,000; a good paying business in a fine location down town; a fine city in eastern part of Minnesota of 22,000 population; good reason for selling. Address "Good City," care The American Artisan, 69 Dearborn st., Chicago, Ill. 18

For Sale—$6,000 stock of hardware, stoves and paint with a tin and plumbing shop in connection; this stock is located in northeastern part of Iowa in a good farming country. Address "Paint," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 18

For Sale—A good clean stock of hardware and tin shop; only one other stock in town; 2,500 inhabitants. O'Dea Hardware Co., Valley Junction, Iowa. 17

## TINNERS' TOOLS.

For Sale—Bicycle repair tools in good condition. For price and number address S. B. Cole, Quincy, Mich. 19

For Sale—A "Sherman" tandem in perfect condition; cheap. T. E. Copelin, 32 No. State st., Chicago, Ill. 16

Wanted—Pipe cutting and threading machine in perfect condition for hand or power use. State size, condition, make, etc. Address Peter Haas, El Paso, Ill. 18

For Sale—Full set tinners' tools, also stock on hand. W. H. Werbe, Kokomo, Ind. 18

For Sale—Set tinners' tools, including Robinson's 8 ft. cornice brake. Herman Krebs, 62 E. Chicago Ave., Chicago, Ill. 18

Wanted—Three-inch foot brake. Address 309 Ave. "E," Cedar Rapids, Ia. 18

For Sale—Set of tinner's tools; write for list and price. Chas. Rodeman, Garrett, Ind. 17

For Sale—Complete line of tinners' tools; also slaters' tools; good condition. Address "H. W.," Klondyke Incubator Co., Des Moines, Iowa. 17

## HELP WANTED.

Wanted—Good tinner that can do all kinds of tin and furnace work. Wages paid according. Chris. Eckhart, Alton, Ill. 19

Wanted—A good tinner, mostly inside job work; good wages and steady work to the right man. Townley Stove Co., Terre Haute, Ind. 19

Wanted—Two good tinners for furnace and general shop work; steady work, $2.50 per day the year round. J. R. Allen, Crookston, Minn. 19

Wanted—At once, a good, sober, industrious tinner. Can give steady employment. Write wages expected. C. S. Sheerin, Marshfield, Wis. 19

Wanted—Experienced, hustling young stove salesman for city and country. Address "Hustler," Care The American Artisan, 69 Dearborn St., Chicago, Ill. 18

Wanted—At once, a good all-round tinner; steady work and a good job for the right man; German preferred. Address The Miller Hdw. Co., Sheboygan, Wis. 19

Wanted—A good tinner, sober, single, who can do shop and furnace work, and roofing; good wages, permanent work. Write at once to C. M. Brooks, Moweaqua, Ill. 19

Wanted—Good tinner and furnace man, who has some knowledge of plumbing; good job for sober, reliable man; German preferred; state experience and wages. Address H. G. Lewis, Portage, Wis. 19

Wanted—Two good cornice makers; steady work and good wages paid. Good chance for a first-class man to take share in the business. Address "G. B.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 19

Wanted—A young boy as clerk in small hardware store, who has had one or two years' experience in tin shop, and would like to finish trade; a good steady job for a good honest boy; state wages, and give references. Address W. F. Rehbein, Gray's Lake, Ill. 9

Wanted—At once, a good reliable tinner; steady work every day in the year and good wages. Must be sober, reliable and do inside and outside work. Write, stating wages wanted, with full particulars in first letter. J. H. Jones & Son, 414 E. Main St., Streator, Ill. 19

Tinner Wanted—An assortment workman preferred. Write, stating age, whether married or single, experience, wages asked. Board and room can be had here for $3.50 to $4.00 per week. A steady job for the right man. Moseley & Pritchard Mfg. Co., Clinton, Iowa. 19

WANTED—Good all-around tinner, handy at iron pipe work and jobbing. Write or call at once. Address Grebe Hardware & Harness Mfg. Co., Barrington, Ill. 18

WANTED—Good tinner; one who has had some experience at furnace work preferred; steady work by the year; good wages. W. E. Benfiett, Fond du Lac, Wis. 18

WANTED—At once a good plumber and tinner. State wages and how long at trade. Address A. W. KUHN, 920 Milwakee ave., So. Milwaukee, Wis. 18

WANTED—A first-class tinner and experienced furnace man; married man and German preferred. To the right party steady employment and good wages. Address Box 1441, Le Mars, Iowa. 18

FIRST-CLASS TINNER can make himself useful around hardware store, an all-round man can have steady job. Cain & Ross, Valparaiso, Ind. 18

WANTED—First-class tinner, who can do furnace and pump work; good pay and steady job. Address Lock Box 34, South Wayne, Wis. 18

Wanted for Montana—A tinner who can do cornice work. State age and full particulars. Wages $3.50 for 9 hours. Address Montana, Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 18

Wanted—At once. Two good tinners who are familiar with furnace work. Married men preferred. Must be steady and sober. To right man will give steady work year around. State wages. Martin & Kuebler, Viroqua, Wis. 18

Wanted—A tinner who can and is willing to clerk in store, who is a general all round mechanic, such as is needed in country hardware store; good wages and steady job to right man. Address, with references, and state wages wanted, I. B. Wensink, Plymouth, Wis. 18

Wanted—A good tinner, furnace and roofing; steady job and charge of shop to right man. Holder-Athey Hdw. Co., Bloomington, Ill. 18

Wanted—At once, tinner and plumber with about two or three years' experience; German preferred, with some experience back of counter; state wages wanted by year, month or week; steady work for right man. Address Julius Schroeder, Glidden, Wis. 18

Wanted—Good tinner and hardware man; can give right man good place. Holmes & Howe, Mt. Vernon, S. Dak. 17

Wanted—Tinner; competent to run tin shop and do plumbing and furnace work; state wages and address. C. J. Johnson, Dell Rapids, So. Dak. 17

Wanted—Good all-around tinner; must be sober and reliable; state wages and give references; steady work all year. H. Wehmhoefer, Beecher, Ill. 17

Wanted—A first-class tinner; steady employment and liberal wages given; a rare chance for good man. Address Martin Engelhart, 473 Lincoln ave., Chicago. 17

Wanted—A tinner's helper; an exceptional chance for a tinner's helper; good wages and steady employment. Address Martin Engelhart, 473 Lincoln ave., Chicago. 17

Wanted—Good tinner; German preferred; one that has some knowledge of plumbing and furnace work; steady job year around. H. A. Brouillet, Lansing, Iowa. 17

Wanted—Good tinner by the Home Pride Malleable Steel Range Co. of Marion, Ind. A man between the ages of 21 and 35 preferred. Give references. Address Home Pride Range Co., Marion, Ind. 17

Wanted—A reliable, sober and industrious man who is acquainted with the hardware, implement and pump business; please state experience, wages wanted; give references. Address R. R. Craig, Wellman, Iowa. 17

Wanted—To correspond with a good, steady, practical tinner who is desirous of a change with a view to employment; must be A1; a rare snap. Address "A No. 1," care The American Artisan, 69 Dearborn st., Chicago, Ill. 17

Wanted—Tinner for shop in country town; must be sober and willing to help on implements when needed; good steady job to the right kind of a man. Address "Shop," care The American Artisan, 69 Dearborn st., Chicago, Ill. 17

## SITUATIONS WANTED.

Situation Wanted—By an all-round tinner, in and outside; furnace and job work; Colorado preferred. Address "K. S.," 787 West Madison St., Hammond, Ind. 19

Situation Wanted—By experienced hardware man as clerk and bookkeeper in hardware establishment; talk English, German and Scandinavian. Steady and sober; can take charge of hardware store if desired. Minnesota or northern Iowa preferred. Address A. Boysen, Casselton, N. Dak. 19

Situation Wanted—By student in International Correspondence Schools of ten years' experience as tinner, clerk, roofer, etc. Would like employment under some good man to get the practical experience of laying out patterns; married; good habits, a hustler with A1 references. Address John Singletary, Mandan, N. D. 19

Situation Wanted—By tinner, 29 years old; sober and reliable; 8 years' experience, including plumbing, gas fitting, hot air and hot water heating; Iowa or Wisconsin preferred. Address "R. W.," care The American Artisan, 69 Dearborn st., Chicago, Ill. 17

Situation Wanted—By tinner, 23 years old; married; strictly sober; speaks English and German; must have steady work; nine years' experience in inside and outside work on plumbing and heating. Address W. J. Schmidt, Sams P. O., Bottineau Co., N. D. 17

Position Wanted—By a first-class tinner and furnace man of twenty-two years' experience; have had several years' experience in cornice shop; can cut and lay out work from plans; none but those wanting a first-class man at good wages need reply; state wages can pay in first letter. Address Fred Stanton, Fargo, N. D. 17

## SPECIAL NOTICES.

### FOR SALE OR RENT

A well established hardware and paint business to invoice about $2,500.00, including a general repair tin shop. Reasons for selling poor health. **A. H. IMIG, Des Plaines, Ill.** 4t-17

**FOR SALE** Hardware business long established; an exceptional chance; located central N. Y. in fine mfg. city of 40,000 people. Will reduce stock to suit purchaser. Write for particulars. Ad. Hardware Company, care The American Artisan, 69 Dearborn St., Chicago, Ill.

**I WOULD LIKE** to have a good sheet iron worker in each town in the U. S. manufacture for me a patent article to supply the trade in his town and neighborhood. Device made of Galvanized Iron; can be built in any good sized tin shop; good demand for it; good profit in making it; can be worked into a good business. Address, 10

**R. M., P. O. Box 333, Milwaukee, Wis.**

### Wanted—Salesmen

to carry our spring line of Rubber Collars as a side line. A strong, up-to-date line. Address

**The Windsor Collar & Cuff Co.,**
4t-19 **Windsor, Conn.**

### WANTED!

***30-Inch Double Seamer***

***Address***

***H. A. GRIFFIN***

***TABLE GROVE, ILL.***

### FOR SALE

**Second-Hand Boiler Rolls,**
**Sheet Iron Rolls,**
**Shears and Punches.**

**BERTSCH & CO.**

**Cambridge City, Ind.** 2t-19

### A FINE OPENING

$1,500 to $4,000.—A nice Furniture, Stove and Buggy stock, in a good county seat in the great Michigan Fruit Belt for sale. Owner has interests in the West to look after and must sell. Stock will invoice $4,000, but can be divided and part of it shipped West. The business is well established and widely advertised. A fine opening. None but a cash deal considered. Address "MICHIGAN HUSTLER," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 3t-19

PROPOSALS will be received at the Bureau of Supplies and Accounts, Navy Department, Washington D. C., until 12 o'clock noon, May 19, 1903, and publicly opened immediately thereafter, to furnish at the navy yards, Portsmouth, N. H.; Boston, Mass.; New York; League Island, Pa.; Norfolk, Va., and Pensacola, Fla., a quantity of electrical material, blocks, **bolts, nuts, rivets,** brushes, brooms, cement, stone, canvas, dry goods, silver plated ware, crockery, glassware, **filters,** glass, **hardware, locks, hinges, tools,** crocus and emery cloth, drawing instruments, **thermometers,** musical instruments, lamps and lamp fixtures, leather and belting, lumber, timber, railroad ties, **drills, taps, dies,** brass, copper, zinc, lead, iron, steel, rails, **solder,** packing, hose, pipe covering, asbestos, alcohol, shellac, lye, **polishing paste,** pipe, pipe fittings, gauge glasses, valves, thimbles, grommets, cork jackets, stationery, **bake pans,** sponges, beeswax, waste, soap, and platform cars. Blank proposals will be furnished upon application to the navy pay offices, New York; Portsmouth, N. H.; Boston, Mass.; Philadelphia, Pa.; Norfolk, Va., and Pensacola, Fla. A. S. KENNY, *Paymaster General U. S. N.* 4-27-03.

**Geo. W. Brown, Jr., Hillsboro, Ill., writes:** "You may kindly discontinue our WANTED TINNER adv. that you have so kindly carried for us the past three issues. I have received replies from Vermont to Dakota and think that we have secured a good man.

### ACETYLENE BURNERS

that are "No more trouble than a hitching post" bear the imprint

# SUNLIGHT

Inducements to Hardware Trade.

**SUNLIGHT LAVA MFG. CO., Chattanooga, Tenn.**

**"CRONK'S"**

**"RUSSEL'S"**

**Exclusively Wholesale.**

### FENCING PLIERS

**LATEST PATTERNS. LOWEST PRICE**

**$8.40** PER DOZEN. 70 CENTS EACH.

EITHER KIND

Yes, we are the Iowa "Good Goods" House.

Our customers like us for that and many other reasons.

**NORRIS & LORING HARDWARE CO.,**
**CEDAR RAPIDS, IA.**

### Genuine Hunter's Sifters

We are the sole manufacturers and there is no other Sifter made that has the reputation or is any comparison to the GENUINE HUNTER'S.

The only Sifter with a loose cap on the handle, so as to clean out the flour that accumulates in it while the Sifter is in use.

**The Best in the World**

Combined Mixer, Scoop, Measure, Dredger, Rice Washer, Pumpkin, Tomato, Wine, Starch and Fruit Strainer.

**The Fred J. Meyers Mfg. Co.,**
**HAMILTON, OHIO**

### BARKEEPER'S FRIEND.

**Marble, Glass, Nickel, Brass, Copper, Tin and German Silver**

can all be cleaned and polished with it easier than with anything else.

Price 25c per lb.

Let us send you a free sample.

**GEO. WM. HOFFMAN,**
295 E. Washington St.,
INDIANAPOLIS, - IND.

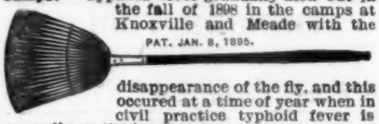
FOR SALE BY JOBBING TRADE.

THE RAPIDITY WITH WHICH THE

### BIGELOW'S WIRE FLY KILLER

Kills but does not crush the fly makes it a rapid seller.

**Extract from Medical Report on Spanish War Camps:** "Typhoid fever gradually died out in the fall of 1898 in the camps at Knoxville and Meade with the




disappearance of the fly, and this occured at a time of year when in civil practice typhoid fever is generally on the increase."

Send for prices and illustrated booklet.

**J. F. BIGELOW, Manufacturer**
**WORCESTER, MASS.**

**Advertising is the root of all money.**

QUITE a little money can be saved and more money can be earned by doing odd jobs of repairing firebrick in your own store in your spare moments. For this purpose there is nothing better than Dixon's Stove Cement. Ask for sample and booklet 18-1.

JOSEPH DIXON CRUCIBLE CO., JERSEY CITY, N. J.

**REPAIRS FOR ALL STOVES AND FURNACES**

Stove Rods, Paste, Stove Putty.
Stove Knobs, Pipe Dampers, Mica, Etc.

**Wm. T. Dust Co., Detroit.**

**REPAIRS**

**FOR ALL STOVES AND RANGES,**

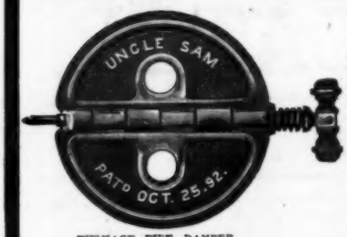
**A. G. BRAUER, 316-318 NORTH THIRD ST. ST. LOUIS MO.**

**Champion Stove Clay**

The only Stove Lining made of crucible materials.
Packed in 2½ lb., 6 lb. and 10 lb. pasteboard boxes and also in bulk.
Order it from your jobber.
The best and most refractory lining made.

**Bridgeport Crucible Co.**
BRIDGEPORT, CONN.

**UNCLE SAM DAMPER! THE PIONEER STEEL DAMPER**




FURNACE PIPE DAMPER.

The handle is enameled wood, will not heat, rigidly clamped and cannot come off. The spring is not affected by heat. The stem is a steel rod, all one piece and nothing to fall apart; pointed and easily driven through the pipe. The Damper Plate is made of cold rolled pickled steel, corrugated to stiffen it and to prevent warping. We call special attention to lightness and strength of these Dampers and their desirability for FURNACE pipes.

"The Difference in Weight Pays the Freight."

Ask Your Jobber for the "UNCLE SAM."

SAYRE STAMPING CO., Sole Manufacturers, SAYRE, PA.

**"Eagle" Brand Copper Rivets and Burrs**
STANDARD FOR QUALITY. (Lake Superior Copper)
—MANUFACTURED BY—
**THE PLUME & ATWOOD MFG. CO.**
29 Murray St., NEW YORK 196 Lake St., CHICAGO, ILL.

DO YOU WANT
**STOVES AND HEATERS**
that are easily sold and STAY SOLD. We have been very successful in designing patterns for such.

**The Gobeille Pattern Co.**
CLEVELAND, OHIO.

**The GEO. W. COPE STOVE PATTERN WORKS**
Cor. Brush & Woodbridge Sts.
DETROIT, MICH.

**Weller Stove Pattern Co.**
1110-1112-1114 State St.
QUINCY, ILL.

**The Milwaukee Pattern Works**
Sketches and Designs for
STOVE AND HEATER WORK OF ALL KINDS.
Correspondence Solicited.
505-507 Cedar Street, MILWAUKEE, WIS.

**Why Worry?**
When you can get
**Polishers and Platers Supplies**
that will give you satisfaction from start to finish.

When in doubt, send me a trial order for anything you need and I will do the rest.

EVERYTHING A POLISHER AND PLATER NEEDS.

**F. B. STEVENS,**
DETROIT, MICH.

**THE YANKEE (IMPROVED ALL STEEL) DAMPER.**

HOT AIR.

THE YANKEE EXCELS.

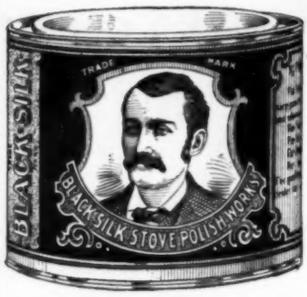
**Above All—Cheapness**—a dealer cannot possibly make dampers as cheaply as we sell the Yankee. Easily put in and taken out of pipes. Stiffest, quickest-working and neatest damper on the market.

It is impossible for this rod when in position to move either way.

**ROD POINTS:** Has wood enameled handle. Wood handle cannot come off. Washer and spring cannot fall off the rod. Same size of holes are punched on each side of pipe. Rod is made of ¼ in. cold-rolled steel and slips into damper very smoothly. **Sample sent to any Dealer without charge.**

SMOKE PIPE.

**The S. M. HOWES CO., Manufacturers, 40-46 Union St., Boston, Mass.**




# BLACK SILK STOVE POLISH

## IT IS BLACK

Has been sold to the trade since 1884 and has never changed it's name

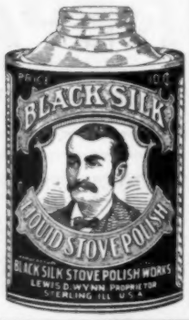
## IT IS GOOD

NOT SOLD TO DEPARTMENT STORES OR MAIL ORDER HOUSES.

MFG. BY **THE BLACK SILK STOVE POLISH WORKS**

STERLING, ILL.

LEWIS D. WINN, PROPRIETOR.



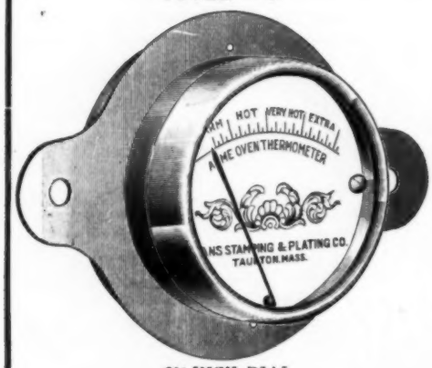

# ACME OVEN THERMOMETERS

*THE BEST IN THE MARKET.*

STYLE "C"

GIVE THEM A TRIAL.

STYLE "D"




2⅝-INCH DIAL

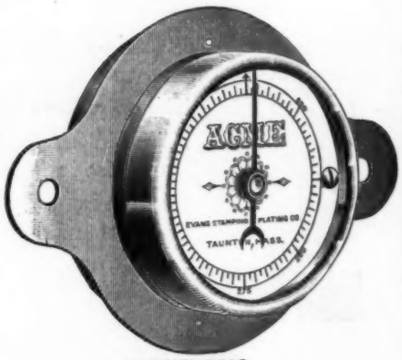
MANUFACTURED BY

THE

**EVANS STAMPING & PLATING CO.**

TAUNTON, - MASS.

C. H. MATTHEWS, Detroit, Mich.
(Western Agent.)




2⅝-INCH DIAL

PUT THE RELIABLE

# STANDARD INDICATOR

IN YOUR

# Range Doors

No. 460.

The Thermometer in Range Doors is called for by all people. It is useful and accurate.

**HELIOS-UPTON CO., Peabody, Mass.,**

or **HENRY GLEASON,** *Agent, 258 Broadway, N. Y.*

## ROOFING SLATE

| | |
|---|---|
| Bangor Union | Maine |
| Sea Green | Red |
| Purple | Unfading Green |
| Penna. Black | Peach Bottom |

FOR SALE BY

**THE AULD & CONGER CO.**

CLEVELAND, O.

SPECIFICATIONS
Use Bortright
Victoria Shingles
OR
SPECIFICATIONS
Use Bortright
Metal Slate

THE ARCHITECTS' CHANCE
To Give ROOF SATISFACTION Without EXTRA COST
Illustrated booklet and samples free.

**CORTRIGHT METAL ROOFING CO.**

Philadelphia and Chicago.

## "THE ILLINOIS"

Sold In Every State

Have Stood the Test of Years.

**METALLIC SKYLIGHTS**

Made in 10 Styles and 500 sizes.

"THE ILLINOIS" are the best skylights made. We also manufacture Cornices, Finials, etc. Send for handsome Illustrated catalogue. Ribbed skylight glass furnished at very lowest prices.

J. H. JONES & SON, Mfrs.,

Lock Box 33. STREATOR, ILL.

J. H. ELLER & Co.
MANUFACTURERS OF
METAL CEILINGS
CORNICE.
SKYLIGHTS, VENTILATORS ETC.
SHEET METAL SPECIALTIES.
1106 E. 5 ST. CANTON, OHIO.

Metal Worker's Crayon.
THE D.M. STEWARD MFG. CO.
UNIFORM DISCOUNT TO THE TRADE.
D. M. STEWARD MFG. CO.
CHICAGO, CHATTANOOGA. NEW YORK

"CANTON" CEILINGS
"Canton" Metal Ceilings are entirely satisfactory to both the party having our metal art plate placed in his building, on account of the artistic effects which they produce and to the contractors because they are so easily and quickly applied, allowing larger profits on the work. No trouble with Canton Metal Ceilings *because the construction is right.*
METAL CANTON CEILINGS
Classified Designs.
No charge for our art metal book "F." Ask us, we'll send you one
The Canton Steel Roofing Co.
CANTON, OHIO

"E. L. Old Style" Roofing Tin
Is a plate of superior quality that has been tried repeatedly and is now used daily, giving universal satisfaction. It carries all of 25 pounds of coating to the box, is stamped and resquared. We have it—no one else. Buy a box and be convinced of its merits.
ILLINOIS ROOFING & SUPPLY COMPANY,
23 LAKE STREET, CHICAGO.

U. S. N. TRADE MARK. M.
ROOFING TIN
MADE BY THE MF PROCESS.
The MF PROCESS of manufacturing roofing tin originated in South Wales two generations ago; from that time to the present the product of the MF PROCESS has been the most reliable and hence the MOST FAVORED.
Recently the NEW METHOD by which terne plates are finished in a manner that gives further protection against corrosion has been combined with the MF PROCESS. The result of this combination is the U. S. EAGLE N. M.
MF
AMERICAN TIN PLATE CO.
BATTERY PARK BUILDING, NEW YORK, N. Y.
MARQUETTE BUILDING, CHICAGO, ILLS.

Improved Quick and Easy Rising Steam, Electric and Hand Power
ELEVATORS
Send for Circulars.
KIMBALL BROS. CO., 1031 Ninth St., Council Bluffs, Ia.
KIMBALL ELEVATOR CO., 139 Vincent St., Cleveland, O.

Edwin B. Stimpson & Son
31 SPRUCE ST. N.Y.
PERFORATORS OF SHEET METALS.

PERFORATED METAL
THE ROBT. AITCHISON PERFORATED METAL CO.
303-305 DEARBORN STREET. CHICAGO, ILL.

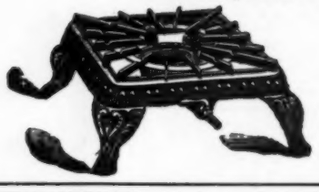
PATTERN LETTERS
WE HAVE THEM
SIZES, ONE EIGHTH TO TWO INCHES.
ROMAN, FOUND FACE GOTHIC, SHARP FACE GOTHIC, HAIR-LINE GOTHIC, FLATTENED FACE GOTHIC, ANTIQUE POINTED AND REVERSED ROMAN FOR BRANDING IRONS.
ST. LOUIS ELECTROTYPE FOUNDRY
211 N. THIRD ST. ST. LOUIS, MO.

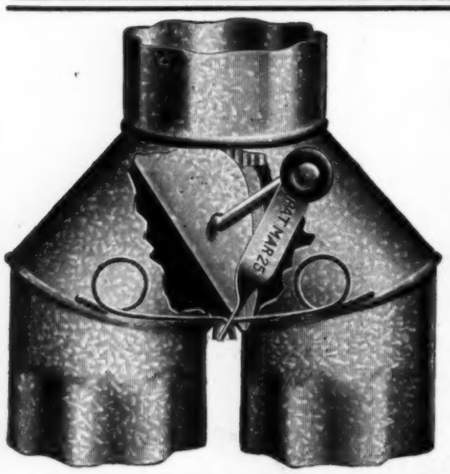
# THE TAYLOR & BOGGIS FOUNDRY CO.

CLEVELAND, OHIO.
MANUFACTURERS OF

## LIGHT GRAY IRON CASTINGS

Builders' Hardware, Dampers and Damper Clips,
Oil and Gas Stoves, Furnace Lamps, Molasses
Gates, Letter Boxes, Hardware Specialties.





# THE PERFECTION RAIN-WATER CUT-OFF

Excels All Others in

Simplicity—Strength—Durability

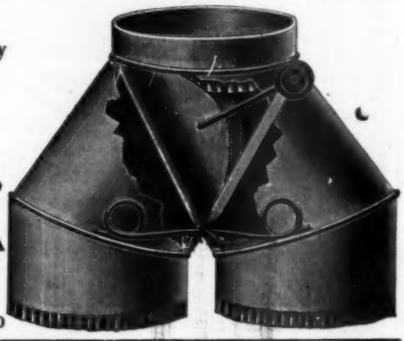
## KLAUER MFG. CO.

Sole Manufacturers

DUBUQUE, - - - IOWA

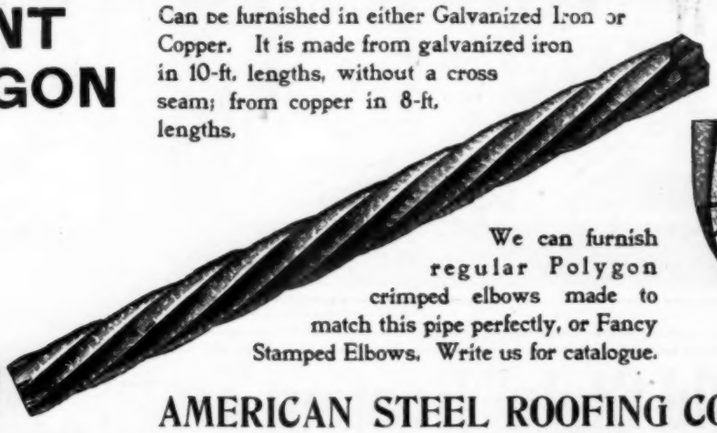
SUCCESSORS TO

W. A. SMITH & CO., Patentees, LIMA, OHIO



# PATENT POLYGON PIPE

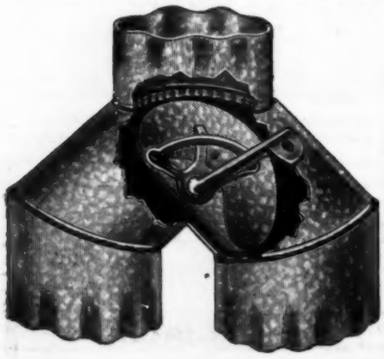
Can be furnished in either Galvanized Iron or Copper. It is made from galvanized iron in 10-ft. lengths, without a cross seam; from copper in 8-ft. lengths.



We can furnish regular Polygon crimped elbows made to match this pipe perfectly, or Fancy Stamped Elbows. Write us for catalogue.

AMERICAN STEEL ROOFING CO. MIDDLETOWN OHIO

# Kuehn's Corrugated Rain Water Cut-Off



was patented by Louis Kuehn, Nov. 14, 1899. We are the only authorized manufacturers of corrugated cut-offs and herewith warn all infringing manufacturers and dealers that they will be prosecuted to the full extent of the law.

***MILWAUKEE CORRUGATING COMPANY, Milwaukee, Wis.***

BERGER'S "Classik" METAL CEILINGS

## The Ones That are Artistic

You don't have to argue to prove that Berger's "Classik" Metal Ceilings are artistic. The ceilings themselves tell the story, and tell it in such a way that there's no getting around it.

Artistic Ceilings are what people want. What people want is easy to sell. Goods that are easy to sell are good ones to handle. Then why not handle Berger's "Classik"?.

Enough said,—write TO-DAY for handsome catalogue and particulars.

THE BERGER MFG. CO.,
CANTON, OHIO.

New York Office: 210 E. 23rd St., New York, N. Y.
New England Branch: 176 Federal St., Boston, Mass.
Philadelphia Office: 1218 Filbert St., Philadelphia, Pa.
Western Branch: 623 N. Main St., St. Louis, Mo.

SPECIALTIES: Ceiling, Roofing, Siding, Eave Trough, Conductor, Hangers, Etc.

LA CROSSE STEEL ROOFING AND CORRUGATING CO., La Crosse, Wis
MANUFACTURERS OF
EAVES TROUGH, CONDUCTOR PIPE

Our make of goods the very best.
Send us your spring order.
Prices the very lowest
Prompt Shipments.

ELBOWS, MITRES, HANGERS, CUT OFFS, ROOFING AND SIDING MATERIAL.

SHEET METAL ARCHITECTURAL ORNAMENTS, STATUARY, ETC.

ART METAL CEILINGS

Roofing, Corrugated Iron, Galvanized Iron, Corrugated Conductor Pipe, Finials, Weather Vanes, Cresting, Etc., Sheet Copper :: ::

GALVANIZED STEEL TANKS FOR ALL PURPOSES.

FRIEDLEY & VOSHARDT, SEND FOR CATALOGUE A21
194-202 Mather St., CHICAGO, ILL.

REMEMBER WE SELL

Galvanized and Corrugated Sheets
Iron and Steel Sheets and Plates
Roofing and Siding, all kinds
Tin Plates and Terne Plates
Conductor Pipe and Eave Trough
Steel Ceilings, Solder, etc.
Bar, Band and Angle Iron
Planished, Polished and Refined Iron
Deep Stamping and High Grade Sheets
GALVANIZERS

Established 1877 Long Distance Phone Main 4864 and 4865 W. U. Code

JOHN McVOY & CO.
Iron Merchants and Metal Supplies
OFFICE: 21 to 25 Michigan Street
Corner Orleans
WAREHOUSES: 21 to 25 Michigan St. / 15th and Center Ave.
CHICAGO

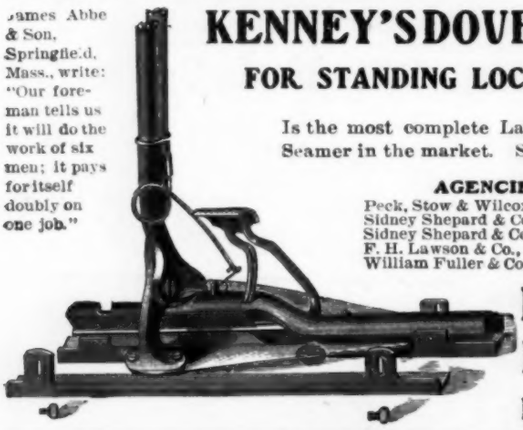
## KEEP THE BALL A ROLLING!

Simply order our goods so you can have them for sale. Your customers will do the rest. As quick as they see our trade mark--they see what they want. Nearest office will supply you with catalogues, etc,

## NATIONAL ENAMELING & STAMPING CO.

NEW YORK BALTIMORE CHICAGO ST. LOUIS NEW ORLEANS MILWAUKEE

James Abbe & Son, Springfield, Mass., write: "Our foreman tells us it will do the work of six men; it pays for itself doubly on one job."



## KENNEY'S DOUBLE SEAMER

### FOR STANDING LOCK TIN ROOFING

Is the most complete Labor-Saving Double Seamer in the market. Send for catalogue.

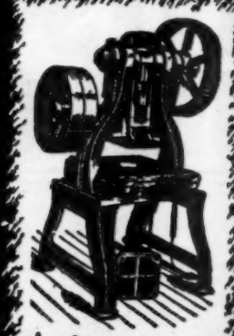
**AGENCIES.**

| | |
|---|---|
| Peck, Stow & Wilcox. | New York |
| Sidney Shepard & Co., | Chicago, Ill. |
| Sidney Shepard & Co., | Buffalo, N.Y. |
| F. H. Lawson & Co., | Cincinnati, O. |
| William Fuller & Co., | Baltimore, Md. |

**Dwight Slate Machine Co.**
**HARTFORD, CONN.**

THE FRED. J. SWAINE CO.

## PRESSES. DIES.



Rolls Seamers. Sheet Metal Tools.

1301 ~~1309~~ N. 7th St. Louis, Mo.

## H. WEISS & CO.

20 Cliff St., New York.

**SKYLIGHT GEARING AND CHAIN LIFTS**

Tinsmiths' and Plumbers' Tools
Cornice Makers' Tools
Coppersmiths' Tools
Pipe Threading Machines
Second-hand goods bought, sold & exchanged

## Has a Host of Friends

Therefore every dealer who wishes to please his customers should carry a line of the **"Buckeye Brand" Decorative Home Paints.** The long list of good points of this paint creates a demand for it everywhere. Our book of Paint Points on application.

**BUCKEYE PAINT AND VARNISH CO.**
**TOLEDO, OHIO.**

YOUNG'S COMBINATION

## STRAINER AND CUT-OFF

OPEN

Body in one piece: cannot break in two.
No levers or springs to break off.
A strainer perfect in construction which ejects all refuse.
All parts riveted and soldered.
Is practically indestructible.
Sold by all jobbers.

CLOSED

**YOUNG MFG. CO., Bellevue, Iowa**

A full assortment of these goods for sale by all the leading Hardware and House-furnishing Stores.

(burned in the enamel) ARE SAFE

We claim Purity and Safety, and Substantiate this claim with Chemists' Certificates.

(Reduced fac-simile of label).

Look for this Label (Sustained by U.S. Circuit Court.) Printed on BLUE PAPER and pasted on every Kitchen Utensil made in Genuine AGATE NICKEL-STEEL WARE as a guarantee of Absolute PURITY and SAFETY

NAME OF UTENSIL.

AGATE L & G Mfg. Co. NICKEL-STEEL-WARE

NO.

Patented Feb. 12, 1895.

| COST | SELL |
|---|---|

Analysis No. 72,339. NEW YORK, Dec. 7, 1896.

We have made a careful examination of a sample of "Agate Nickel Steel Ware" received from The Lalance & Grosjean Mfg. Co., Nov. 30, 1896.

The enamel coating is homogeneous, of extra thickness, and great purity.

It is *entirely free from arsenic, lead and antimony*—metals so often found in enameled goods.

Very respectfully,
STILLWELL & GLADDING,
Chemists to the New York Produce Exchange.

Pierre de P. Ricketts, E.M., Ph.D.
John H. Banks, E.M., Ph.D.

Analysis No. 14,180. NEW YORK, May 5, 1897.

LALANCE & GROSJEAN MFG. CO.:

GENTLEMEN—As requested by you, we purchased in the open market a sample of "Agate Nickel Steel Ware" and have made a careful chemical analysis of the enamel covering of the same.

We find this enamel is *absolutely pure and free from Arsenic, Antimony, Lead and other substances injurious to health.* We can therefore recommend it for all culinary and drinking purposes. Respectfully yours,

RICKETTS & BANKS,
Chemists to the N. Y. Metal Exchange.

Guaranteed Double Coated and Absolutely Pure

Copyrighted.

Read carefully the Chemists' Certificates.

Send for pamphlet soon to be issued. Lalance & Grosjean Mfg. Co.

NEW YORK BOSTON CHICAGO

---

**Garry Iron and Steel Roofing Co.**

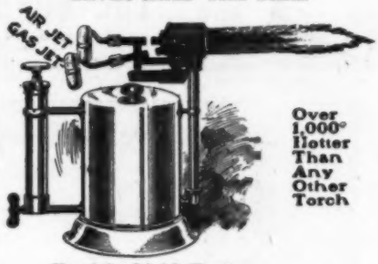
Roll Roofing.
Corrugated Iron.
Metal Shingles.
Clap-boards.
Siding.
Steel Bricks.
Window Casings.
Fire-Proof Shutters.
Eave Trough.
Conductor Pipe.
Elbows.
Cornice.
Skylights.
Finials.

Cor. Coe and Lake Streets, Cleveland, Ohio.

---

**THE TURNER DOUBLE JET GASOLINE BRAZING TORCH**

Unexcelled for Brazing, Tempering, Annealing, Fusing and Soldering. SAVES HALF THE TIME.




Over 1,000° Hotter Than Any Other Torch

No. 4 A—$4.50 Each,
Capacity, One Quart.

The Turner Brass Works,
26 N. Franklin St.,
CHICAGO.

---

**A Point**

Worth Considering When Buying a Fire Pot—

$6.00 Net.

Expense of Running or Cost of Gasoline used in doing a day's work. We know a No. 1 Fire Pot uses less than half the gasoline required by other makes and will do more and better work, thus saving you half the gasoline bill. Jobbers sell at factory price, or we will ship direct upon receipt of $6.00.

Our Catalog is free.

**Clayton & Lambert Mfg. Co.**

DETROIT, MICH., U. S. A.

---

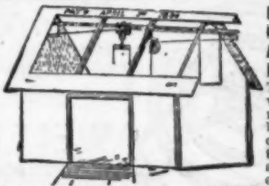
**BERGER BROS.,** MANUFACTURERS OF

**PIPE AND GUTTER.** HEAVY GAUGES AND COPPER A SPECIALTY

**BERGER BROS. CO.**

Office and Store, 237 Arch St.; Warerooms, 100-02-04 Bread St.;
Factory, 3114-16-18-20 N. 17th St., PHILADELPHIA.

---



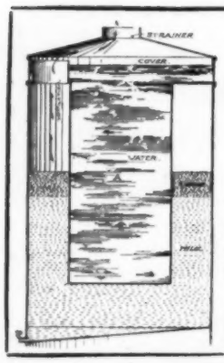
**RONEY HAY CARRIER AND FORK RETURNER.**

This Returner will return carrier and fork before the team can turn around thereby saving all hard work of pulling carrier back by a trip rope. AGENTS WANTED.

RONEY RETURNER CO., Box G, Independence, Ia.

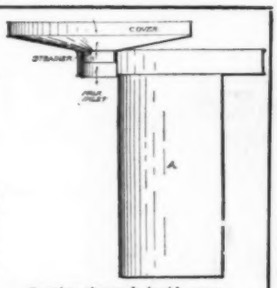
---

JOS. P. BELL, Baraboo, Wis., Writes: "Please take my ad. out of your paper. If you don't I will have to hire a man to answer the letters I am receiving."



THE
# JERSEY
Cream Separator.

This Separator is practically TWO IN ONE, because it can be used as a Single Separator, (water and milk together), or as a Double Separator, (water and milk separate). All parts are interchangeable and the cover fits both vessels



Section through inside part.

**GALESBURG CORNICE WORKS,**
141 E. Ferris St., GALESBURG, ILL.

# JUST ONE MINUTE

IS IT QUALITY? IS IT PRICE?

We have BOTH in

## The Frost King Separator

Water and milk not mixed. They are bound to please your trade that demand this style of Separator as they sell for from 10 to 25% less than asked by others. Write to-day for Catalogue and prices.

**Lawrence Mfg. Co., Toledo, O.**

Pat. Applied For.

## THE SURPRISE CREAM SEPARATOR

The milk is not mixed with the water Skimmed milk not diluluted with water is worth money to the farmer.

Write for prices and secure agency.

***Every Separator Guaranteed.***

*Made of best heavy tinplate and is durable*

**SEITHER & CHERRY CO.,**
KEOKIJK, IOWA.

# O-RIB-O

WARE
BRISCOE MFG. Co.
DETROIT.

THE
# Peerless Flue Stopper

Steel wire springs instead of sheet iron stays.

Stays where you put it, and is absolutely soot and smoke proof.

Made either plain or decorated.

Send for miniature sample and prices.

**WELLING-BOWERS MFG. CO.**
LIMA, OHIO.

Successors to WELLING MFG. CO., Columbus, Ohio.

**The BOSS CREAM SEPARATOR**

The most complete device for handling milk winter and summer. No mixing of milk and water. Thousands were sold last year, and many more will be sold this year.

Write at once for descriptive circulars and prices.

**Bluffton Cream Separator Co.**
BLUFFTON, OHIO.

**The SUPERIOR CREAM SEPARATOR.**

The Only Separator That Saves Work and All the Cream.

Legs and Strainer With Each One.

For prices and agency write

**Superior Mfg. Co.,** Indianapolis, Indiana.

We Make BRASS
# FAUCETS
of Any Size or Style for
## Cream Separators, Milk and Oil Cans.

ASK FOR CATALOGUE.

**THE CLARK NOVELTY CO.,**
ROCHESTER, N. Y.

**Hero & Charm Barrel Churns, Union Geared Churns, Anti-Bent Wood Churns, Ash Dash Churns.**

Patent dashers. O I C Quartered Oak Stable Pails, Everlasting Cypress Tree Tubs. Most extensive churn manufacturers on earth.

AMERICAN WOODEN-WARE MFG. CO., TOLEDO, O.

## THE KING
## Cream Separator

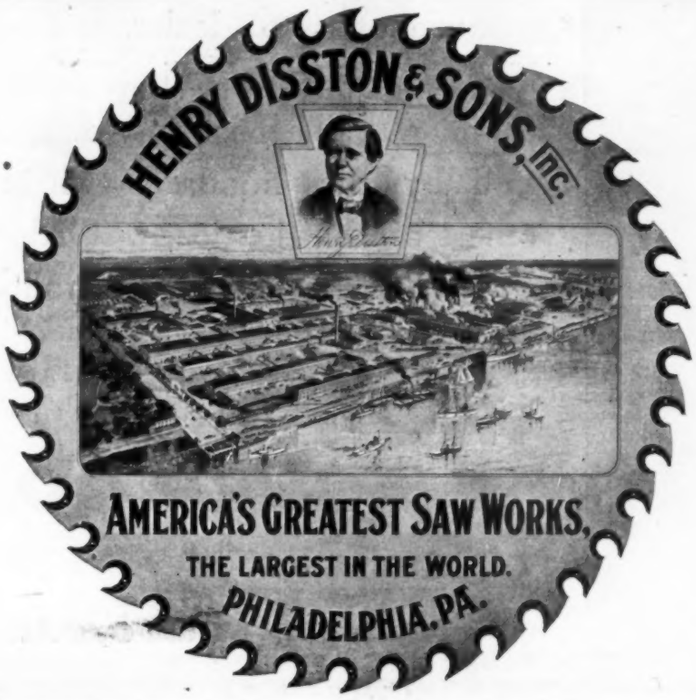
separates all the cream. No cranks to turn, no crocks or pans to wash, no skimming to do, no water mixed with the milk. Highest points secured on butter, several thousand sold last year, all giving good satisfaction, price within the reach of all. Write for terms and prices. Mention this paper.

**KING DRILL MFG. CO.,**
Nebraska City, Neb.

# Hurwood Tools Are Indestructible

WRITE FOR CATALOGUE

**The Hurwood Mfg. Co.,**
PLANTSVILLE, CONN.




# THE OMAHA MOP PAIL

THESE ARE BOUND TO PLEASE.
Write Us.

**CENTRAL MFG. CO., OMAHA, NEB.**

## "LIGHTNING" AND "BLIZZARD"

## FREEZERS

**THEY ARE**
Well Advertised,
In Demand,
Easily Sold,
Satisfactory in Use,
Of Known Reputation.

**THEY EXCEL IN**
Easy Running,
Quick Freezing,
Economy,
Convenience,
Practical Results.

**NORTH BROS. MFG. CO.**
PHILADELPHIA, PA.

# THE CLEVELAND & BUFFALO TRANSIT COMPANY

C&B LINE

CONNECTING
**CLEVELAND and BUFFALO**
"WHILE YOU SLEEP"

UNPARALLELED NIGHT SERVICE. NEW STEAMERS
"CITY OF BUFFALO"
AND
"CITY OF ERIE"

Both together being, without doubt, in all respects the finest and fastest that are run in the interest of the traveling public in the United States.

TIME CARD
DAILY INCLUDING SUNDAY

| LEAVE | ARRIVE |
|---|---|
| Cleveland 8 P.M. | Buffalo 6:30 A.M. |
| Buffalo 8 " | Cleveland 6:30 " |

CENTRAL STANDARD TIME

ORCHESTRA ACCOMPANIES EACH STEAMER

Connections made at Buffalo with trains for all Eastern and Canadian points, at Cleveland for Toledo, Detroit and all points West and Southwest.

SPECIAL LOW RATES CLEVELAND TO BUFFALO AND NIAGARA FALLS EVERY SATURDAY NIGHT, ALSO BUFFALO TO CLEVELAND.

Ask Ticket Agents for tickets via C. & B. Line. Send four cents for illustrated pamphlet.

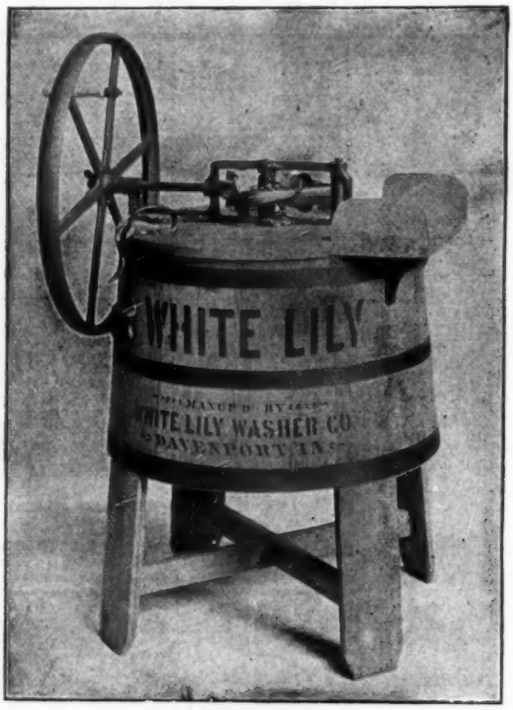
**W. F. HERMAN, General Passenger Agent**
CLEVELAND, O.

## Magic Pattern Rule

Will lay out patterns for any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammell. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction. Price, complete in a nice wooden box with Chart, $4.00 net cash. (Mention THE AMERICAN ARTISAN.)

**Lufkin Rule Co.,**
Saginaw, Mich.

# WHITE LILY




Washers are sold direct from manufacturer to dealer. The highest in speed. The lightest running. The most satisfactory. Sell by the hundreds where others sell by the dozen. Order a sample and work up a profitable trade.

**WHITE LILY WASHER CO.**

**TOLEDO, OHIO**
**DAVENPORT, IOWA**
**SAN FRANCISCO, CAL.**

THE POPULAR

# OCEAN WAVE WASHERS

**Once sold they never come back "BECAUSE" they Wash Clean**

WRITE FOR PRICES AND EXCLUSIVE AGENCY.

**Light**
**Running**
**Handsome**
**Well Made**

**Adjustable for High or Low Speed**

SOLD ONLY TO ONE DEALER IN EACH TOWN.

TWO THOUSAND ESTABLISHED EXCLUSIVE AGENCIES.

# Voss Bros. Mfg. Co.

MENTION THIS PAPER.

**DAVENPORT, IOWA.**

# 1900
# BALL-BEARING WASHER

The tub is made of the best material and hooped with galvanized wire, electric welded hoops, which are embedded, by a special process, into grooves in the tub, and clamp the staves so tightly that it is impossible for the rust to get under them and eat them up. The legs are symmetrical and nicely finished in natural wood, and are united at the top by heavy malleable castings and strongly braced with iron frame below. Through the heavy castings attached to the tops of the legs and up through the tub, runs a heavy cold rolled steel rod. This rod is threaded at the bottom and firmly screwed down through the castings, and is reinforced at the end by a nut which is drilled and riveted to the rod. On the bottom of the tub there is a large iron spider running in three directions, nearly to the chimes or edges of the tub, and this is firmly screwed to the bottom. The center of this casting is very heavy, and screwed into its upper side is a pipe which runs up through the tub, forming a stuffing box for the steel rod before referred to, to run through. On the inside of the bottom of the tub there is a blind nut that turns down, thus firmly securing the bottom to the casting; and between the joints is heavy rubber packing which makes them water tight. On the lower side of this casting there is a large, round head turned, and in it and its counterpart is a perfect bearing in which are two steel tracks and twelve bicycle balls, thus forming a perfect ball bearing. This makes it turn like a bicycle wheel.

## The 1900 Washer Co.
**BINGHAMTON, N. Y.**

# Do You Know
## That the O. K. WASHING MACHINE

is the best made, the lightest running and the most attractive washer on the market? *Are you selling it? If not, why?* Every first-class dealer should sell it, because it is made of the best materials, by the best mechanics that can be obtained, and every one sold will sell another.

*Write us for Circulars and Prices.*

**H. F. BRAMMER MFG. CO.** Dept. B. **DAVENPORT, IOWA**

# Peoria Washing Machines.

**BEST IN THE MARKET.**
**MADE WITH BALL-BEARINGS.**

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.

**Send for Catalogue.**
**Secure the Agency.**

**CLARK, QUIEN & MORSE,**
**PEORIA, ILL.**

# Special Wash Boilers
IXXX

Sizes 11x20¾ and 12x22¼.

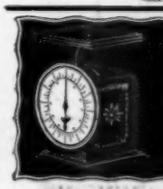
**The Boilers that bring you trade and help you keep it.** Made with flat bottom. **Guaranteed full weight, 16 oz. Copper Bottom.** Royal handles and pieced cover.

Catalogue and Prices on application.

—**We have no traveling representatives**—

Buy direct and the result is that you receive the **best of good goods** at lowest prices.

## STUBER & KUCK
**Manufacturers of Pieced Tinware and Specialties.**
**PEORIA, ILL.**



# PELOUZE SCALES
ARE THE STANDARD FOR
ACCURACY, DURABILITY & SUPERIOR WORKMANSHIP
BUY OF YOUR JOBBER. INSIST UPON GETTING THE PELOUZE MAKE
No E 90 AS SHOWN 24 LBS.
No T 90 WITH TIN SCOOP.
No 92 ½ BRASS DIAL, TILE TOP.
PELOUZE SCALE & MFG. CO.
CATALOGUE, 35 STYLES. CHICAGO.

# HOMESEEKERS EXCURSIONS
On FIRST and THIRD TUESDAYS in each Month to **VIRGINIA**
**Via NORFOLK & WESTERN RAILWAY**

For all information as to Rates and Tickets and for LAND PAMPHLETS and descriptive matter, address
**ALLEN HULL, D. P. Agt., Columbus, Ohio**

## Every Prudent Planter Provides Himself

with a **"NEVER-BREAK" GARDEN TROWEL** in preference to any other. This trowel is made for strenuous service. Blade and socket are made of uniformly thick steel. No tin ferrules, nor anything flimsy about this tool. The handle will not cramp the user's hand; it is turned to comfortable size out of natural finished hardwood.

Catalogue of Garden Trowels and Seamless Drawn Steel Cooking Utensils free on request. You should have one.

**THE AVERY STAMPING CO., :: Cleveland, Ohio.**

Makers of "Never-Break" Goods.

## LONG CHAIN NOSE SIDE CUTTING PLYER

Made of finest tool steel and carefully tested before leaving the factory.

For telephone manufacturers, machinists, jewelers, opticians, electricians, etc., it is indispensable.

Send for our Green Book of Hardware Specialties for particulars and price.

**UTICA DROP FORGE AND TOOL CO.,**
Manufacturers of NIPPERS and PLYERS,

**SMITH & HEMENWAY CO.**
Manufacturers of CUTLERY and HARDWARE SPECIALTIES.

**296 Broadway, New York City, New York.**

## American Family Scale

**BEST IN THE WORLD.**

**It is made of STEEL, TIN or BRASS Scoop Top.**

A most beautiful and attractive scale for all purposes. Beautifully enameled, ornamented and striped. Weighs 20 pounds by ounces. Occupies but little space. Is light and easily moved. It can be regulated by turning the brass screw on top. It is always ready and easily understood. It is a convenient scale to use, and has no weights that may be lost. You can look this one in the face to prove its accuracy without looking for weights. Every scale examined before leaving the factory and warranted correct.

MANUFACTURED BY

**AMERICAN CUTLERY CO.**
**CHICAGO, ILLINOIS.**

## SOME FACTS ABOUT TYPEWRITERS

Great progress has been made in building typewriters in the last three years, greater advances than in all the time previous. Years of experience have shown what was valuable and desirable and what should be sacrificed. Some typewriters do good work and are durable, yet are hard to operate and are cumbersome; others are too complicated and easily get out of order, do not keep alignment, etc.

Operators who have used The Fox Typewriter are unanimous in agreeing that it combines more desirable features than any writing machine yet produced. It is a basket type machine, with ball bearing carriage, two oz. key tension, half inch key dip aluminum finger levers with individual tension, adjustable typebars—insuring perfect alignment even after years of service, line lock, automatic line spacer, and automatic ribbon movement, combining the features that give durability with the lightest touch, easiest action and most simple construction.

Our 1903 catalogue tells all about it and will be sent for the asking. Our free trial plan enables anyone, anywhere, to try "THE FOX" for ten days. Write us to-day about it. FOX TYPEWRITER CO., LTD., 454 FRONT ST. GRAND RAPIDS, MICH.

**You can get the entire mail box trade when you offer the**

**"GEM" at $1.00**

WRITE US ABOUT IT.

**C. A. Peck Hardware Co.**
**Berlin, Wis.**

# Stanley Rule and Level Co.

***IMPROVED CARPENTERS' TOOLS*** **Sold by All Hardware Dealers**

**NEW BRITAIN, CONN.**

# THE HORIGAN WATERWORKS

— AN —

## Effective System

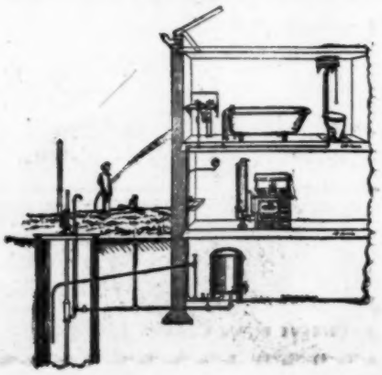
of Pumping Water by **Compressed Air**

**The Original Horigan System, that all others have imitated**

**SYMPLICITY THE GREATEST FEATURE.**

Convincing facts in our booklet. Correspondence solicited.

**The HORIGAN SUPPLY CO.**
**ST. JOSEPH, MO.**



# Tea Kettles Stove Kettles

and all other vessels necessary to equip the well arranged kitchen

Manufactured by

## Blacklock Foundry

SOUTH PITTSBURG TENN.

## THE RAPID STEAM COOKER

Is a marvel of economy in first cost, time required for cooking, and fuel consumed. It is durable, it is steam tight, it is convenient.

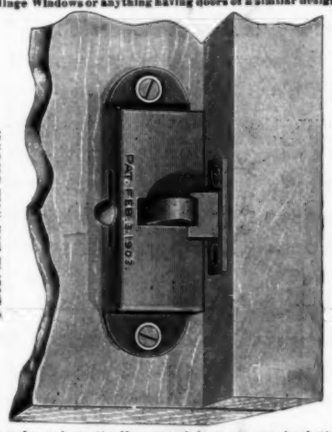
The Rapid Steam Cooker leaflet, telling all about it, on request. Agents wanted.

**ROTARY STEAM COOKER CO.**

101 Main Street, : BATTLE CREEK, MICH.

## The Duplex Automatic Screen Door Catch.

Is a practical and useful article, and is also used on Cupboards and Hinge Windows or anything having doors of a similar design.




1 Doz. in Box with Screws.

It works automatically, requiring no manipulation by hand or foot, as it automatically catches when the door closes, firmly holding it closed, until released by a slight pull or push, and can be dead locked when so desired. There is nothing in its construction to weaken or give out, and it can be applied by any person without difficulty. The DUPLEX CATCH gives unqualified satisfaction and is heartily endorsed by those who have used it, which insures a ready sale by the Hardware Dealer. Give it a trial.

The catch is furnished in the following finishes: Dull nickel on steel, old copper on steel, solid brass on steel. Is both cheap and good. Easily sold, as we furnish dealers with working model. All first-class hardware jobbers handle it. Made by

**DUPLEX LATCH COMPANY,**

Chamber of Commerce Bldg., CLEVELAND, OHIO.

## Only 1/3 of a Day

Between

**CHICAGO**

and

**CINCINNATI**

via the

**MONON ROUTE**

CHICAGO, INDIANAPOLIS & LOUISVILLE RAILWAY

and C. H. & D. Ry.

Choice of 4 Superb Trains Daily.

DAY TRAINS equipped with Parlor and Dining Cars.

NIGHT TRAIN, with Palace, Sleeping and Compartment Cars.

CHAS. H. ROCKWELL, Traffic Manager. FRANK J. REED Gen. Pass. Agt.

200 Custom House Place, Chicago.

## TACKS

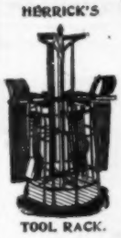
TOWER M'F'G. CO.

ELM & FRONT STS.

CINCINNATI, O.

MANUFACTURERS

HERRICK'S



TOOL RACK.

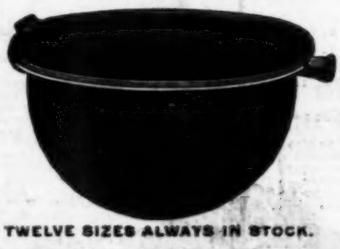
## Well Displayed Is Half Sold!

You will find it a paying investment to use Herrick's tool racks, tool brackets, sampling hooks, hammer and hatchet cases and screw cases. Address

**F. A. HERRICK CO.**

Jackson, Mich.

## SPERRY'S CALDRONS....



Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to original, as they have light bottoms and heavy sides and hold less.

**D. R. SPERRY & CO.,**

HOLLOW-WARE FOUNDERS,

BATAVIA, ILL.

TWELVE SIZES ALWAYS IN STOCK.

## THE LEONARD CATALOG CABINET

Offers the Best System for the care of Catalogues.

Made of Oak, front quarter-sawed and highly polished. Size 22 in. wide, 24 in deep, 63 in. high. Has compartments for every size of catalogue. Every space is numbered and catalogues are arranged in the space they fit closely; catalogues are then given the same number as their space, and same number entered on the card index with titles. There is also a cross index for articles. This system is the outgrowth of a long experience and the benefits derived from it are enormous. Send for colored circular and full description.

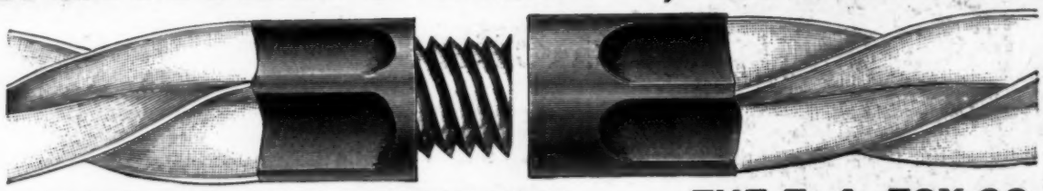
Price, with the two Card Indexes.... $25.00

Price, with Leonard System for buyers added..... 35.00

LEONARD MANUFACTURING CO.,

34 Market St., Grand Rapids, Mich.

**LIGHTNING RODS,** COPPER, GALVANIZED STEEL.



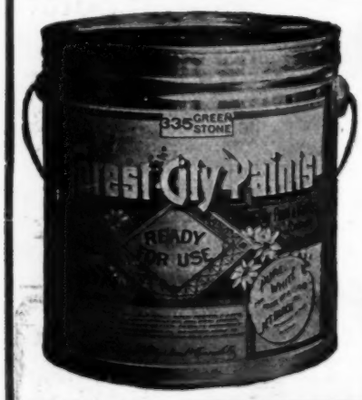
THE TRADE SUPPLIED AT LOWEST RATES.
Send for New Illustrated Catalog, No. 4.

THE E. A. FOY CO.
640 Main Street, CINCINNATI, OHIO.

**THE UDELL WORKS,**
INDIANAPOLIS, IND.
STEP LADDERS, CLOTHES BARS, HOOK RACKS, FOLDING CLOTHES RACKS, TOWEL ROLLS, TOWEL ARMS, ROPE REELS, IRONING STANDS AND BOARDS, FOLDING TABLES, COMMODES, MEDICINE CABINETS.
W. A. STOKES & CO., 30 Warren St., New York.

**BUY** Your goods well from a jobbing house that will give you attractive prices and prompt shipments. We are wholesalers of shelf hardware, house and bank trimmings, "Cutler's Easy" tools and cutlery.

**CUTLER HARDWARE CO.**
**WATERLOO, IOWA**




**RIGHT**

In quality and price are the **Forest City Paints.** It has paid other dealers to handle them, why not you? Let us quote you?

**THE FOREST CITY PAINT & VARNISH CO.**
CLEVELAND, O.

Style **A** All Steel Mower.

**GENUINE PHILADELPHIA LAWN MOWERS**
MADE ONLY BY
The Philadelphia Lawn Mower Co.
3101 to 3109 Chestnut Street,
PHILADELPHIA, PA., U. S. A.

Send for Illustrated Catalogue.

Pacific Coast Representatives, BRIDGE & BEACH MFG. CO., San Francisco, Cal.

## An Inexpensive Trip To California.

Fifty Dollars will be the price of a ticket to San Francisco or Los Angeles, and return, from Chicago, via the Chicago, Milwaukee & St. Paul and Union Pacific line, leaving Chicago May 3, or any day from May 12 to 18, inclusive. Tickets will be good to return until July 15. Less than three days from Chicago to San Francisco is the time of the new overland service via this line.

If you are ever going to visit California you should go this summer. Not only will the cost be nominal, but you will find the month of May a most pleasant season for the trip. There is no more delightful summer resort in the United States than Los Angeles with its mountains fifteen miles north and its sea-coast fifteen miles south. There is no more fascinating city in America than San Francisco.

A sojourn on the Pacific Coast will put new breath in your lungs, richer blood in your veins, stronger muscles in your limbs, and greatly increase your knowledge of the country you live in.

Literature descriptive of the new overland service to California as well as information about tickets and train service, promptly forwarded on request.

F. A. MILLER, General Passenger Agent, Chicago.

**The "Weber Junior" Pumper** is all complete, ready to attach to pump. Equals 30 men pumping water. Uses but little gasoline. Is shipped crated completely erected, all connections made. Easy to start, any one can operate it. Every one guaranteed. Other sizes up to 50 H. P. Send for catalog. Weber Gas & Gasoline Engine Co., P. O. Box 1115v, Kansas City, Mo.

Can also be used for other power purposes.

HENRY SEARS & SON 1865 WARRANTED

# QUEEN RAZORS

THE ORIGINAL HENRY SEARS & SON, 1865.

EASY TO SELL.

ALWAYS SATISFACTORY

YOU WILL FIND THEM READY FOR WORK.

**FARWELL, OZMUN, KIRK & CO.,—St. Paul.**

SOLE DISTRIBUTERS.

HENRY SEARS & SON 1865 WARRANTED

# The Greatest Stove and Range Wagon Ever Built

Low down. Short Turn. Thousands in use. Ask for Catalogue and Prices.

**SHIPMAN, BRADT & CO. - - DEKALB, ILL.**

# IWAN'S VOLCANO

**REVOLVING AND VENTILATING CHIMNEY TOP** Unsurpassed for creating strong, regular draft at all times.

**Iwan's Patent Improved Post Hole and Well Auger**
Best in the world for fence, telephone and telegraph post holes, wells, plumbing, etc.

**Perfection Wire Conductor Pipe Hanger** Made of galvanized wire. For frame or brick buildings, holds pipe 1 inch from building to permit painting.

**Write your jobber or us for prices on the IWAN SPECIALTIES**

Mnufactured Only by **IWAN BROTHERS, Streator, Ill.**

**If**

You want practical up-to-date ideas about steam heating, furnace heating and hot water heating, **You should get the House Warming Manual.**

**If**

You want the practical experience of many experts rather than the heating theories of one man, **You should get the House Warming Manual.**

**If**

You desire estimates and plans of heating work that will save you many dollars in your work, **You should get the House Warming Manual.**

**Price, $3.50. For sale by all booksellers, or by**

**DANIEL STERN, 69 Dearborn St., Chicago.**

IMPROVED NATURAL STONE GERM PROOF

# WATER FILTERS

Prevent Zymotic Diseases by pushing sale of these goods in your locality.

EVERY FILTER IS GUARANTEED TO BE ABSOLUTELY GERM PROOF.

EVERY FILTER IS A PERFECT FILTER WHEN IT LEAVES OUR FACTORY.

Every shipment contains a handsome display card. Price lists and discounts are furnished upon application. Manufacturers of Sanitary Stoneware of every description. Pottery Established 1[illegible]

**FULPER POTTERY CO.**
FLEMINGTON, N. J.

***Compartment Sleepers***
***Standard Open Sleepers***
***Palace Parlor Cars***
***Table d'hote Diners***
***Luxurious Day Coaches***

Are some of the many features of a trip over the

# Big Four Route

***CHICAGO to INDIANAPOLIS and CINCINNATI***

Ask for Tickets via the "Big Four."

***J. C. TUCKER, G. N. A.,***
***234 Clark St., Chicago.***

# HOME PRIDE

## MALLEABLE STEEL RANGES IN THE FOLLOWING OVENS:

23 x 23 x 15½
20 x 23 x 15
20 x 21 x 15
18 x 21 x 15

Height of oven, two inches above the ordinary family range—Furnished with 6-9 inch lids, 4-9 inch and 8 inch hot plate, and 6-8 inch lids—Heavier than the heaviest in material though two inches smaller in the same sized ovens—Black enameled with blue door trimmings—Solid blue steel, including high closet—Right and left hand flush portable reservoirs, and elevated left hand portable reservoir—Home Pride Oven Indicator on every Range—Finished in the standard nickel finish of our special full nickel including oven and closet door bands, frames, hinges, lugs and etc.—The **Only Smooth Full Nickel** finished range built.

**CATALOGUE AND ADVERTISING MATTER FOR THE ASKING**

# HOME PRIDE

## RANGE CO., MARION, IND.

Sausage Stuffer, Lard and Fruit Press with Patented Corrugated Spout

8 Sizes and Styles

Meat Juice Extractor

No. 21 $2.50

Bone, Shell and Corn Mill

No. 750 $8.50

N. Y. Branch, 10 Warren Street

ENTERPRISE

# Food Choppers

TINNED

No. 100 *chops 2 lbs. of Meat per minute* $1.50
No. 300 *chops 5 lbs. of Meat per minute* $2.25

**Four Knives with each Machine**

Fine Medium Coarse Nut Butter Cutter

Order from your Jobber Illustrated Catalogue Free

**The Enterprise Mfg. Co. of Pa.**

Philadelphia, Pa., U. S. A.

Rapid Grinding and Pulverizing Mills

*40 Sizes & Styles for Hand, Steam & Electric Power*

No. 3 $5.50

Raisin Seeder

No. 36 $1.00

Cold Handle Polishing IRONS

No. 82 $7.50 doz.

San Francisco Branch, 105 Front Street

**HARDWARE**
**CUTLERY**

**BICYCLES**
**SPORTING GOODS**

**GUNS**
**RIFLES**

**TINPLATE**
**AMMUNITION**

Immediate Shipment Can Now Be Made of
"McClure's Genuine Charcoal Iron Re-Dipped"
BRAND ROOFING TIN
A Guarantee of 15 Years is given with every sheet.
Cost is less than 1-3 that of sheet copper.
THE McCLURE CO.
PITTSBURGH Sole Makers PHILADELPHIA
MILLS: WASHINGTON, PA.

THE "CENTENNIAL"
Rain-Water Cut-Off
The strongest, most durable, and cheapest CUT-OFF on the market.
The only single Cut-Off made to fit CORRUGATED and Plain Pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers. Patent applied for.
Manufactured only by
Cooney & Geiger,
19 and 21 E. South St., INDIANAPOLIS, INDIANA.

"PULLMAN"
Sash Balances
Are you selling them?
In use Everywhere.
Look for the Metal Tapes in All New Buildings.
Folder No. 2 sent free.

PULLMAN MFG. CO.
Rochester, N. Y., U. S. A.

EXCELSIOR
FOR PACKING PURPOSES
Ask for price F. O. B. Your station.
THEO. P. HUFFMAN & CO.
648 & 650 W. 34th Street, NEW YORK CITY.

BRADLEY SHELF BRACKETS.
Strong, Light and All Right.
ATLAS MFG. CO., New Haven, Ct.

WE HAVE
SIMPLIFIED OUR BUSINESS
Having disposed of our entire stock of House-Furnishing Goods, Kitchen Utensils, etc., we shall devote our entire attention to the
Three Lines of
Tinner's, Roofer's and Furnace Men's Supplies.
Complete Stocks. Prompt Shipments.
The J. M. & L. A. Osborn Company
Cleveland and Columbus, Ohio.

THE "STEVENS-POPE"
RE and DE CAPPER QUICKEST AND MOST SERVICEABLE TOOL MADE.

DESCRIPTION
The body C is hollow and contains a plunger for seating primers and a spring for returning parts to initial position. To the rear end of this body are fulcrummed levers—A A—which engage said plunger. To the rear end of this plunger is hinged the expeller B. The forward part of the body has a slot D for receiving head of shell for capping, and a slot E into which primer is dropped, coming to exact position to enter primer pocket.

PRICE Nickel Plated $1.50

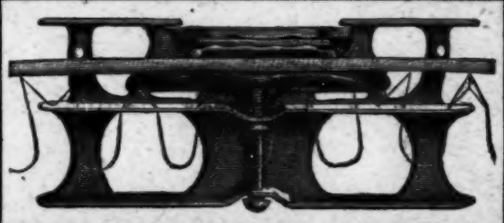
SEND FOR CATALOG OF
Fire Arms

J. STEVENS ARMS & TOOL CO.
298 MAIN STREET
CHICOPEE FALLS, MASS.

The "Globe" Ventilator
In Brass, Copper, Galvanized Iron and with Glass Tops for Skylight purposes.
For Perfectly Ventilating
Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.
Smoky Chimneys Cured.
"Globe" Ventilated Ridges. Send for Pamphlet.
Manufactured by
Globe Ventilator Co., Troy, N.Y.

ATKINS Makes the Only GENUINE EXCELSIOR SAW TOOL
Comprising Combined Side File, Jointer and Raker Tooth Gauge, Setting Block and Tooth Set Gauge.

Beware of base and cheap imitations claiming to be "just as good" as the Atkins. If you want a cheaper tool, our "Leader" will suit you.



Nearly One Million sets of Excelsior Tools have already been sold. Most popular tools for keeping cross-cut saws in order on the market.

E. C. ATKINS & CO., LEADING SAW AND TOOL MANUFACTURERS.
Factories: INDIANAPOLIS, IND.
Branches: New York City. Memphis, Tenn. Atlanta, Ga. Minneapolis, Minn. Portland, Ore.